

Appendix A

RF Test Data for BT V5.0(BDR/EDR) (Conducted Measurement)

Product Name: Portable CD Player

Trade Mark: Nextron

Test Model: CB-500BT

Environmental Conditions

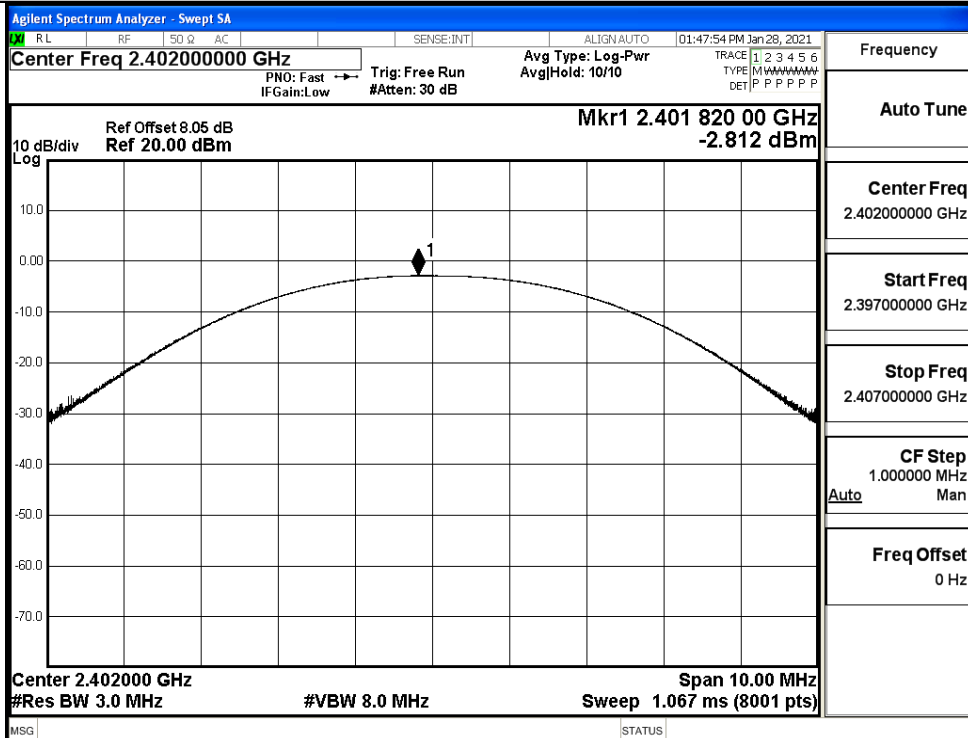
Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Ben Jin
Supervised by:	Li Huan

A.1 Maximum Conducted Peak Output Power

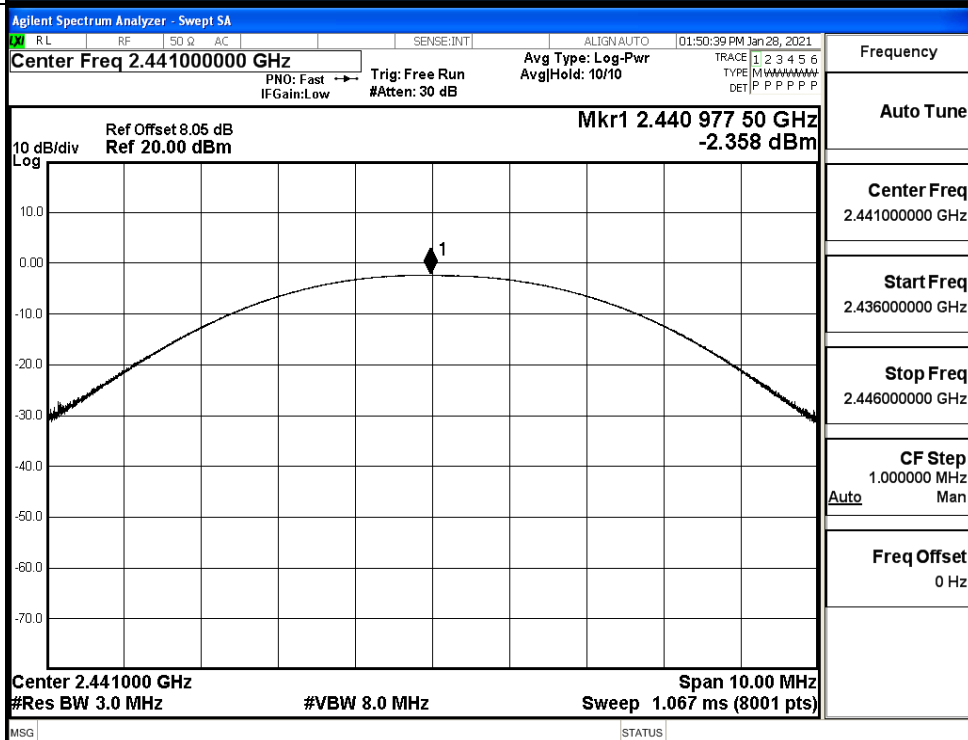
Mode	Channel.	Maximum Peak Output Power [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-2.812	21	PASS
	MCH	-2.358	21	PASS
	HCH	-2.207	21	PASS
$\pi/4$ DQPSK	LCH	-1.865	21	PASS
	MCH	-1.375	21	PASS
	HCH	-1.195	21	PASS
8DPSK	LCH	-1.341	21	PASS
	MCH	-0.898	21	PASS
	HCH	-0.767	21	PASS

Test Graphs

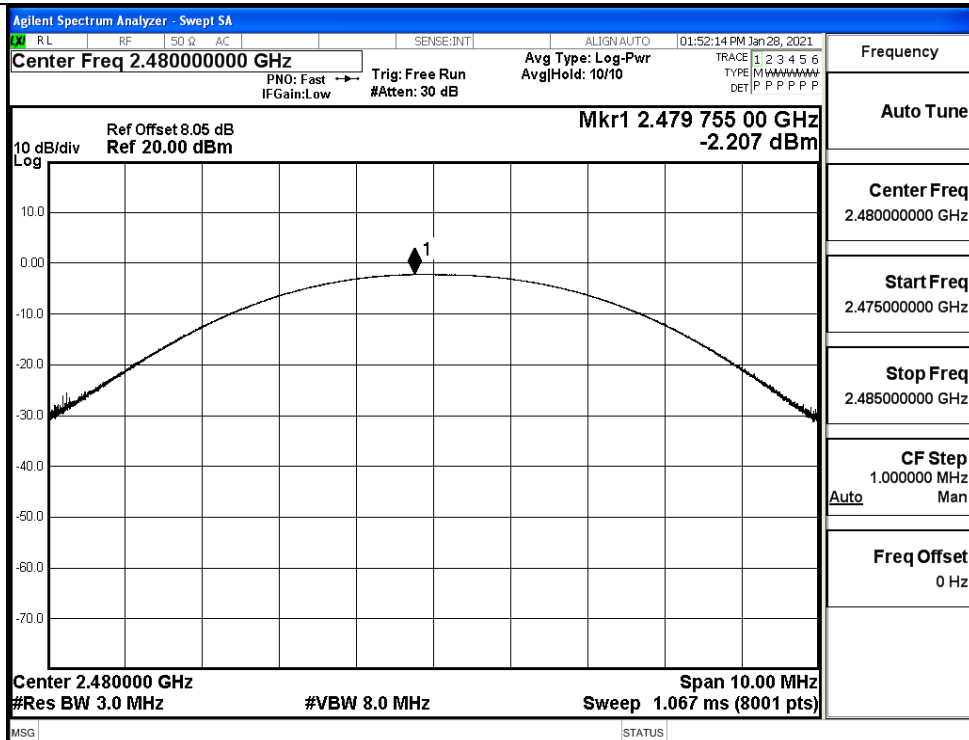
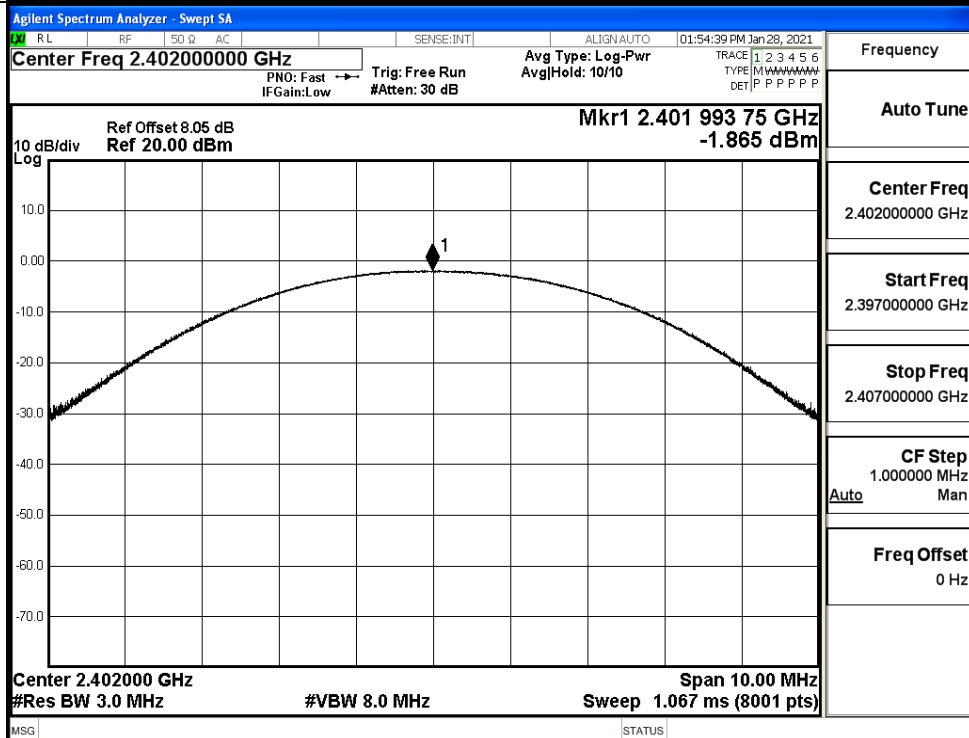
GFSK/LCH

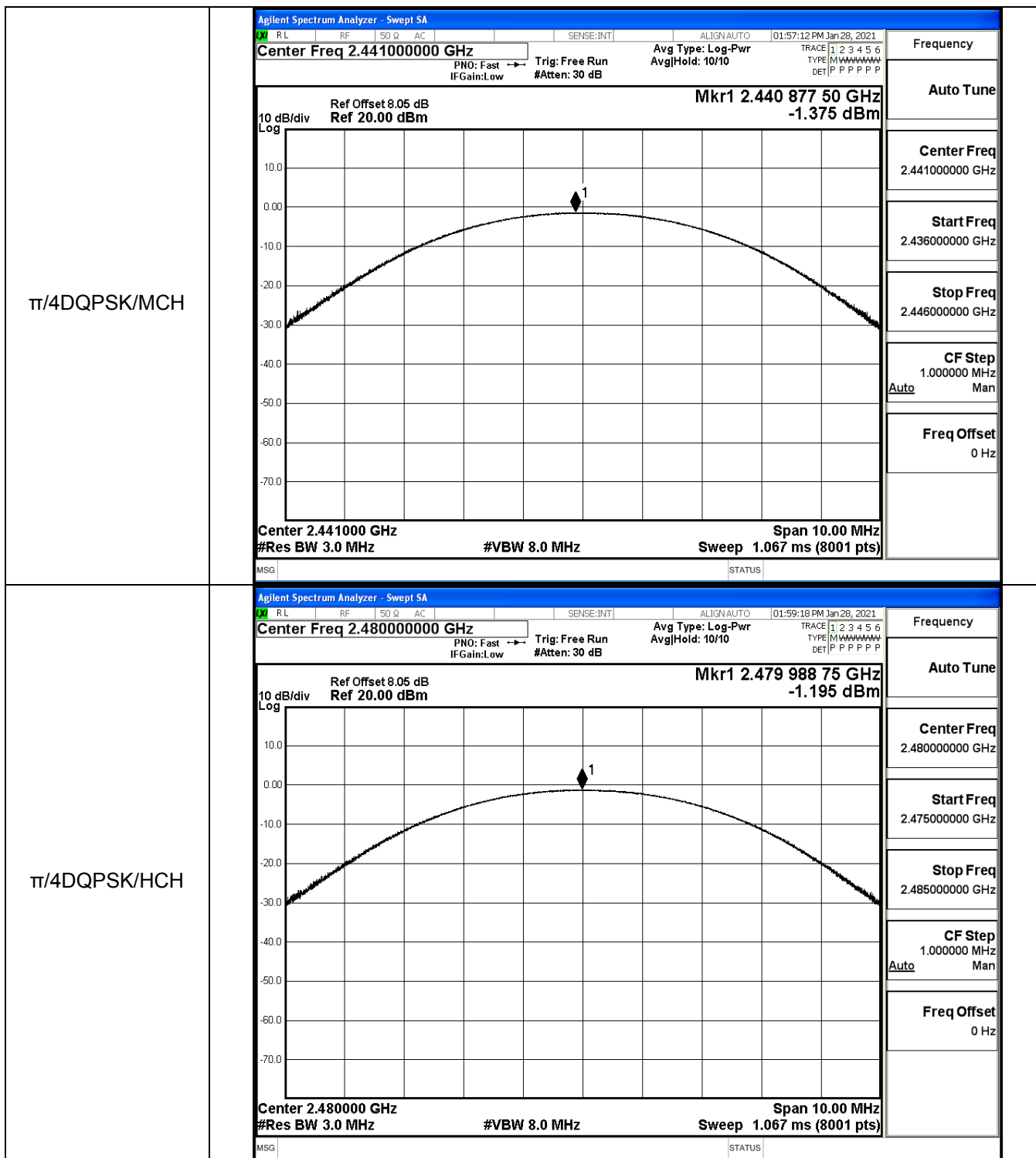


GFSK/MCH

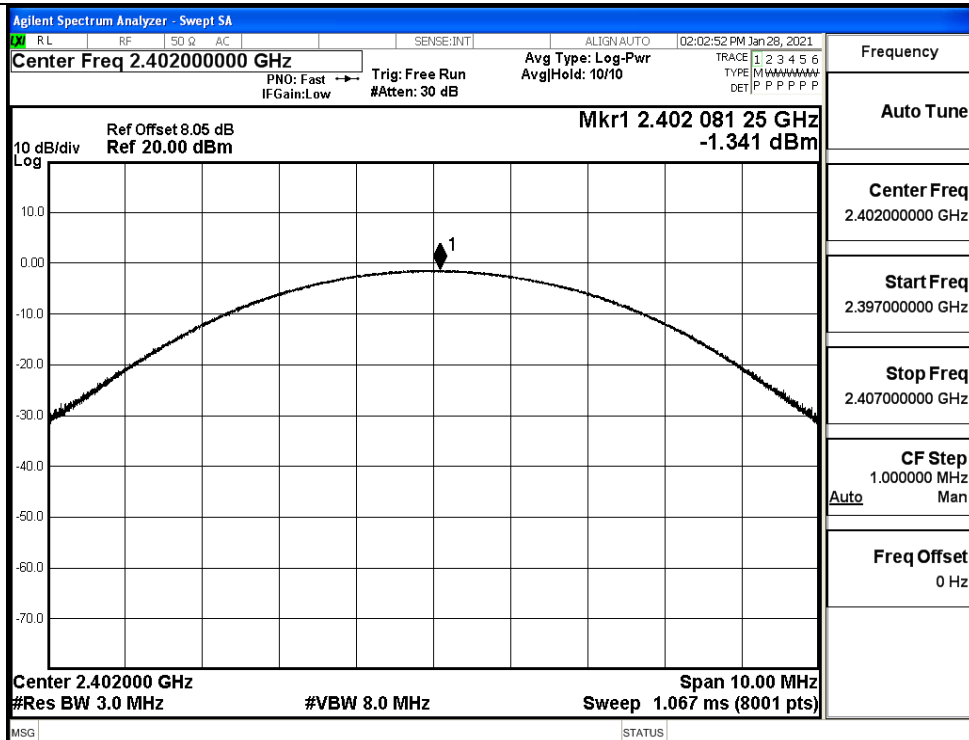


GFSK/HCH

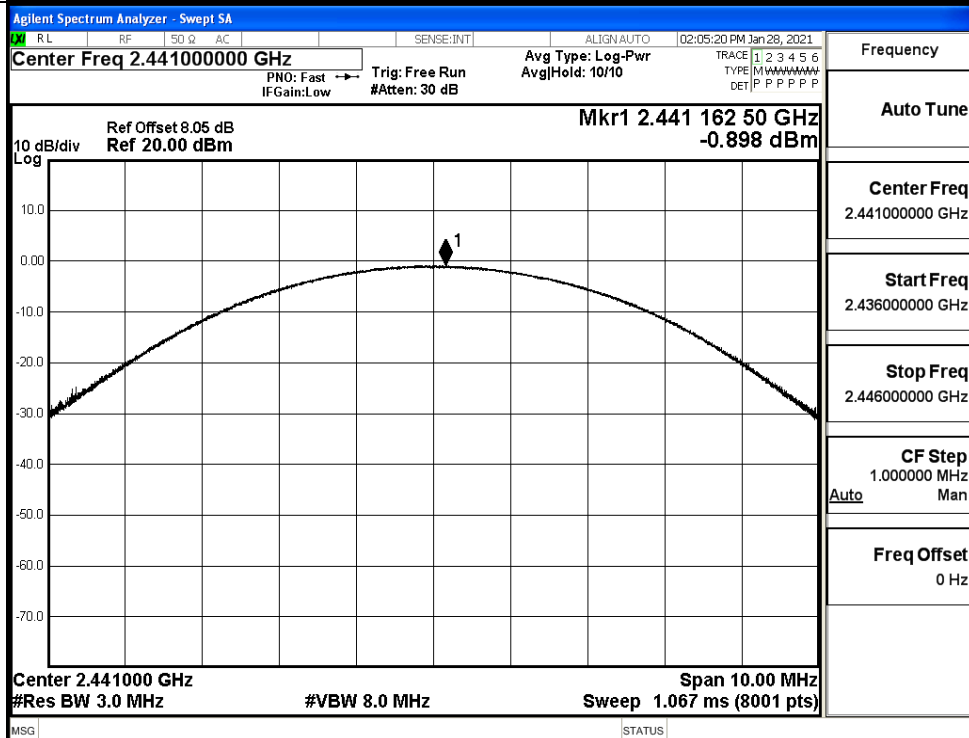
 $\pi/4$ DQPSK/LCH



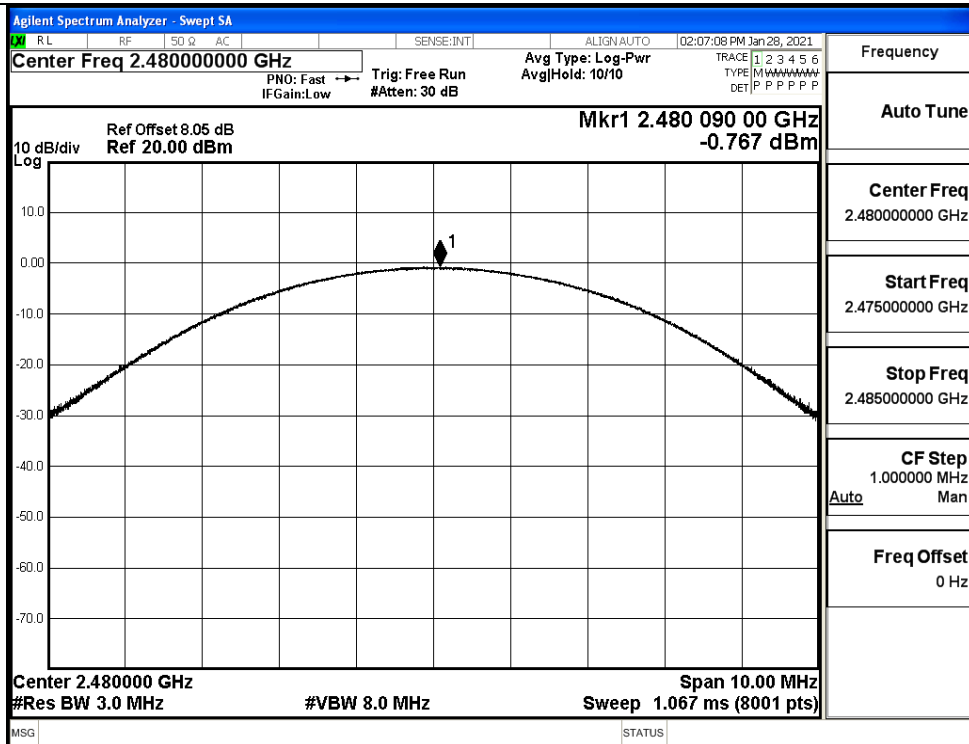
8DPSK/LCH



8DPSK/MCH



8DPSK/HCH

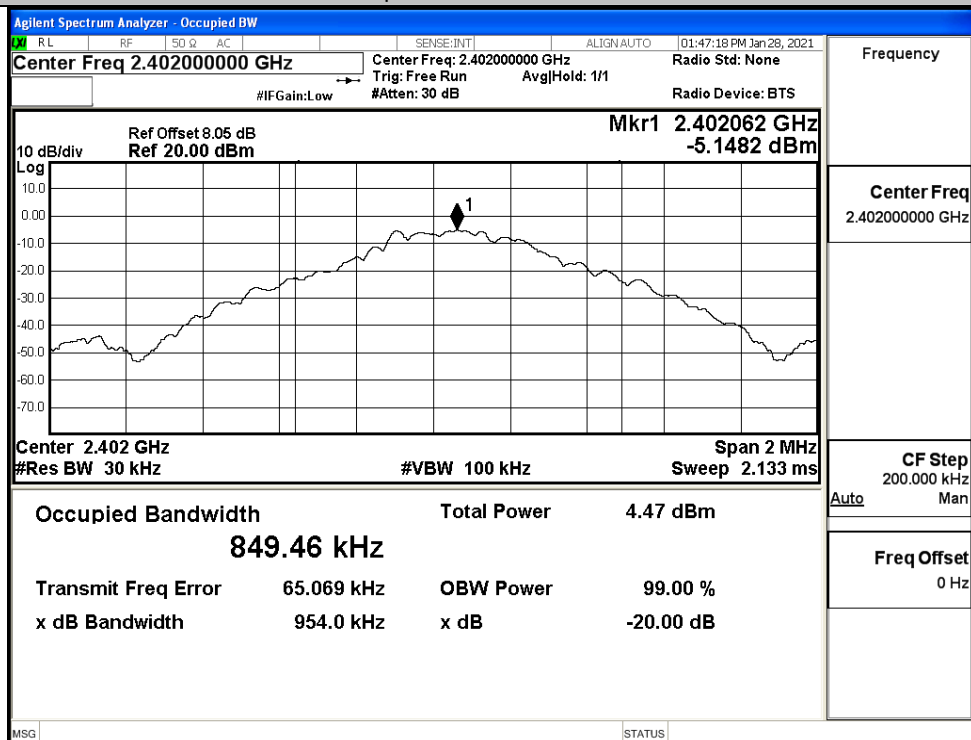


A.2 20dB Bandwidth

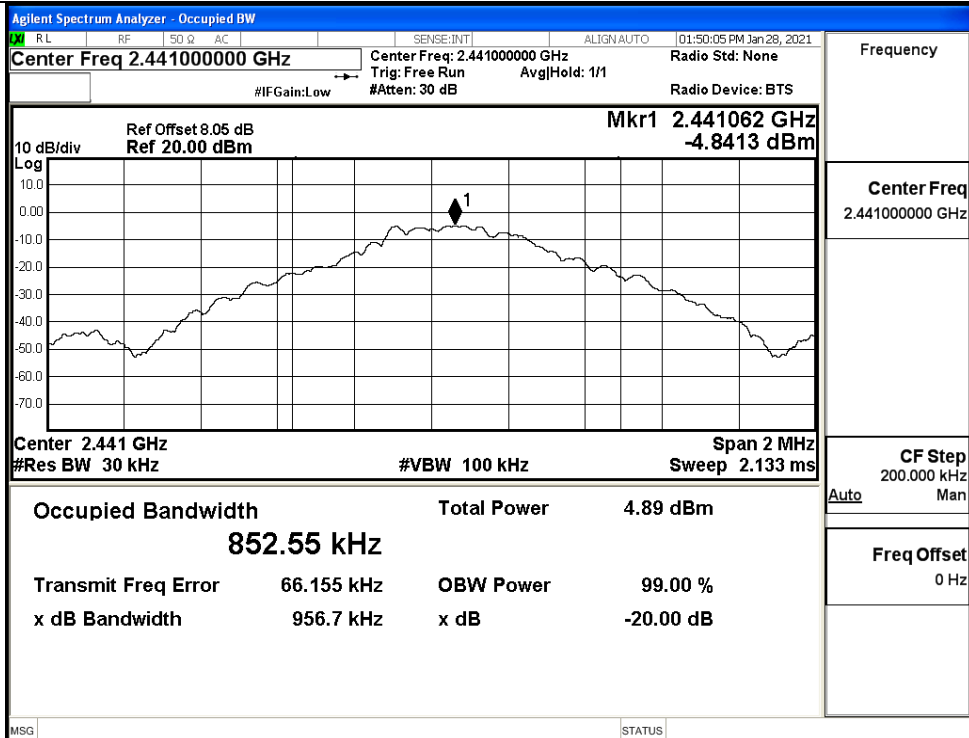
Mode	Channel.	20dB Bandwidth [MHz]	Limit [MHz]	Verdict
GFSK	LCH	0.9540	Not Specified	PASS
	MCH	0.9567	Not Specified	PASS
	HCH	0.9540	Not Specified	PASS
$\pi/4$ DQPSK	LCH	1.284	Not Specified	PASS
	MCH	1.283	Not Specified	PASS
	HCH	1.281	Not Specified	PASS
8DPSK	LCH	1.298	Not Specified	PASS
	MCH	1.297	Not Specified	PASS
	HCH	1.298	Not Specified	PASS

Test Graphs

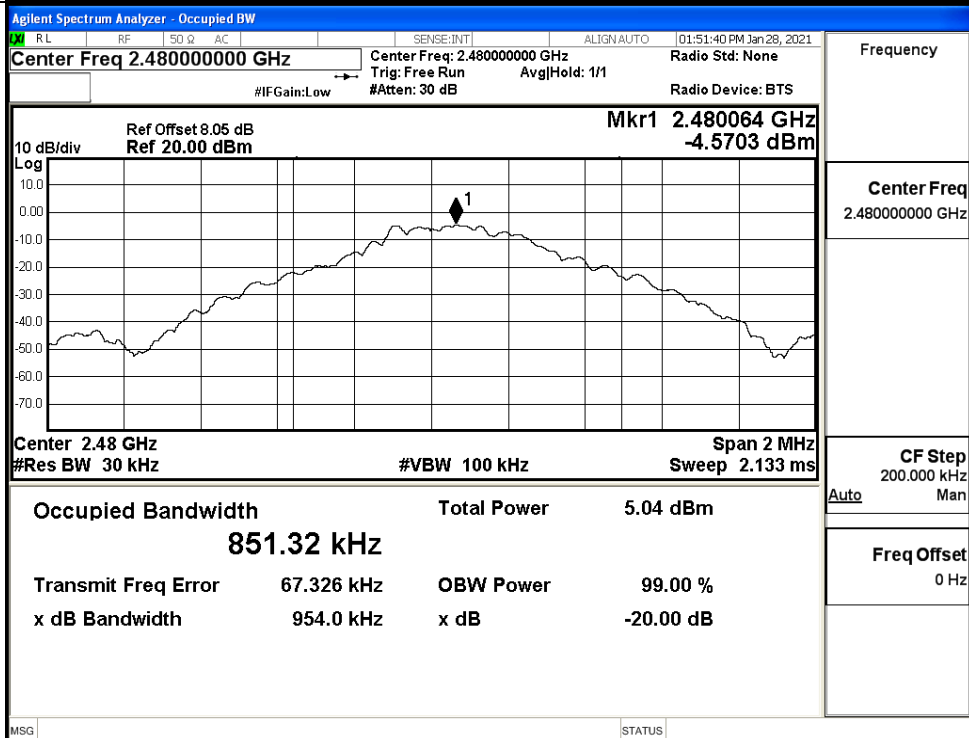
GFSK/LCH

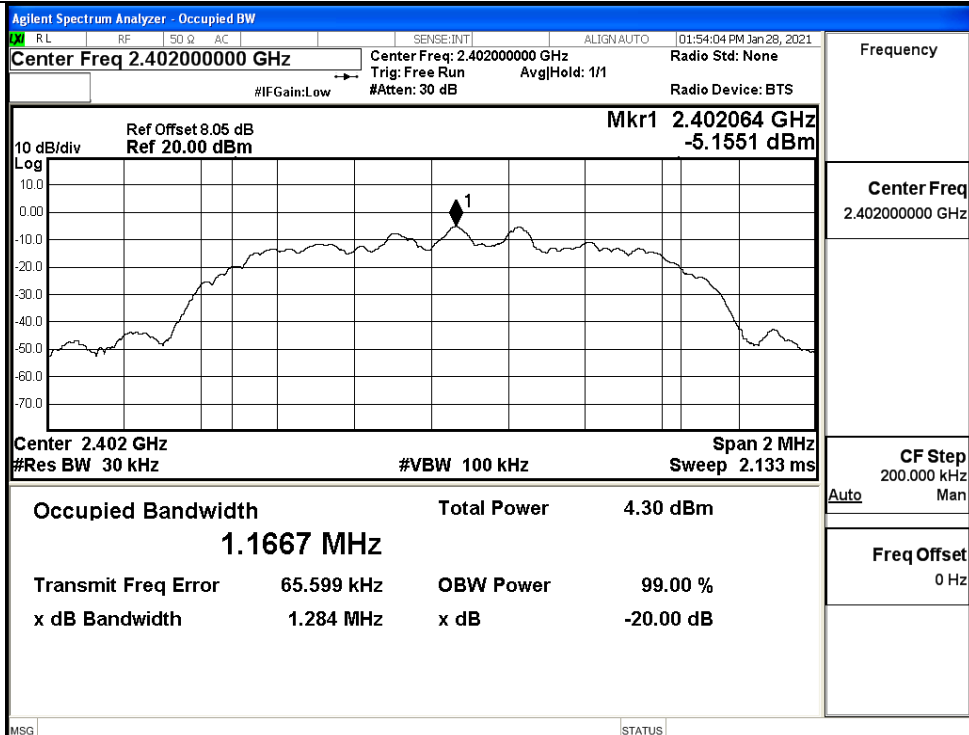
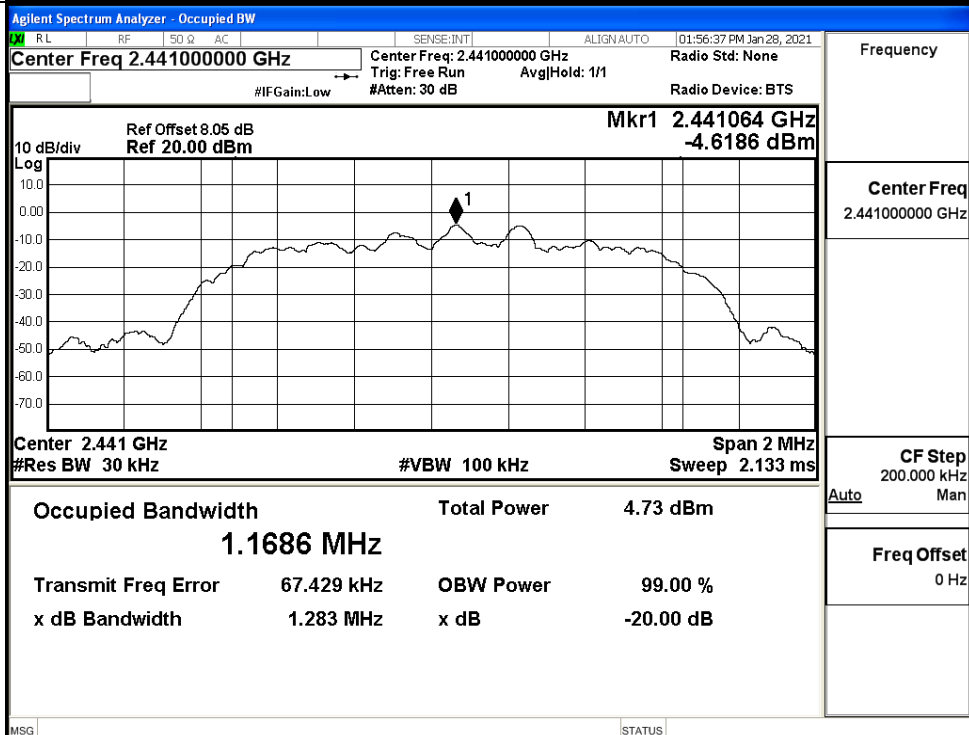


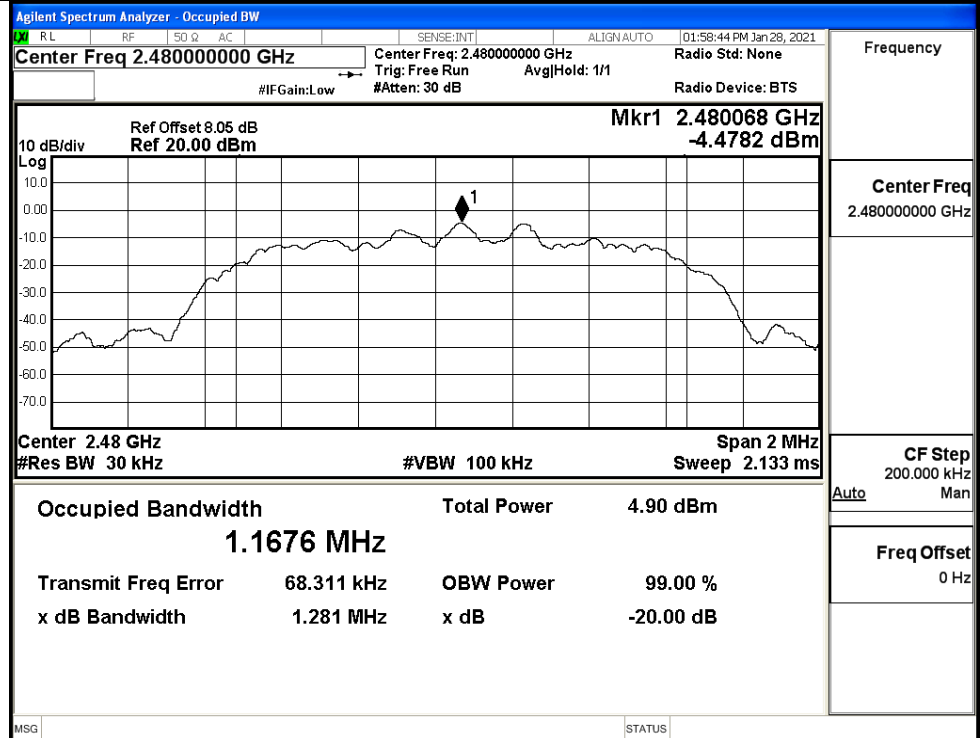
GFSK/MCH



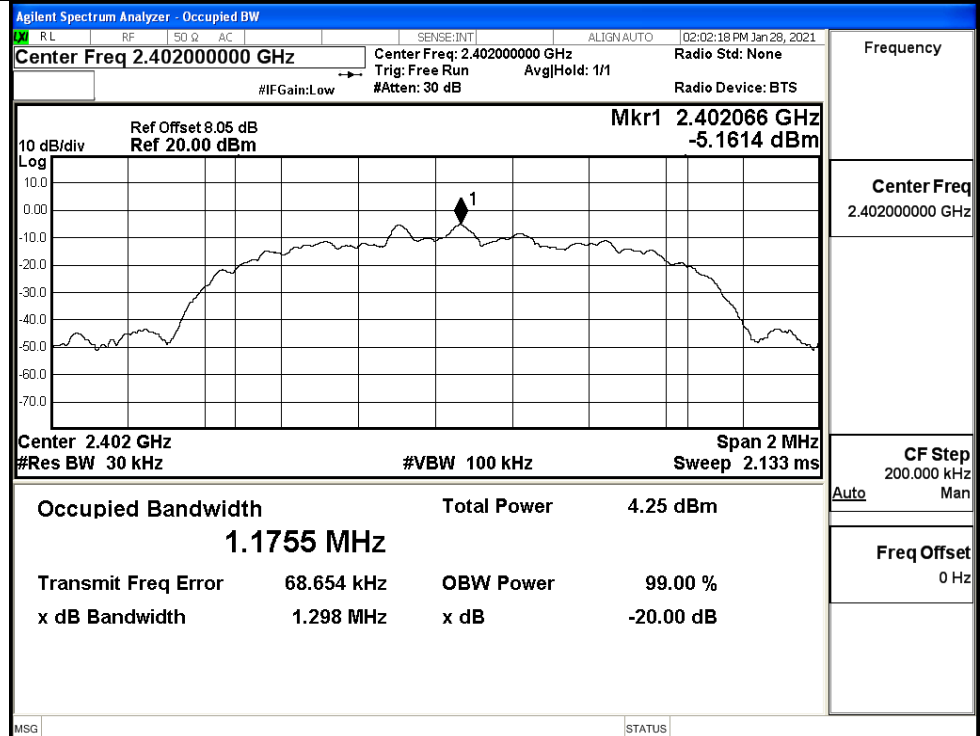
GFSK/HCH



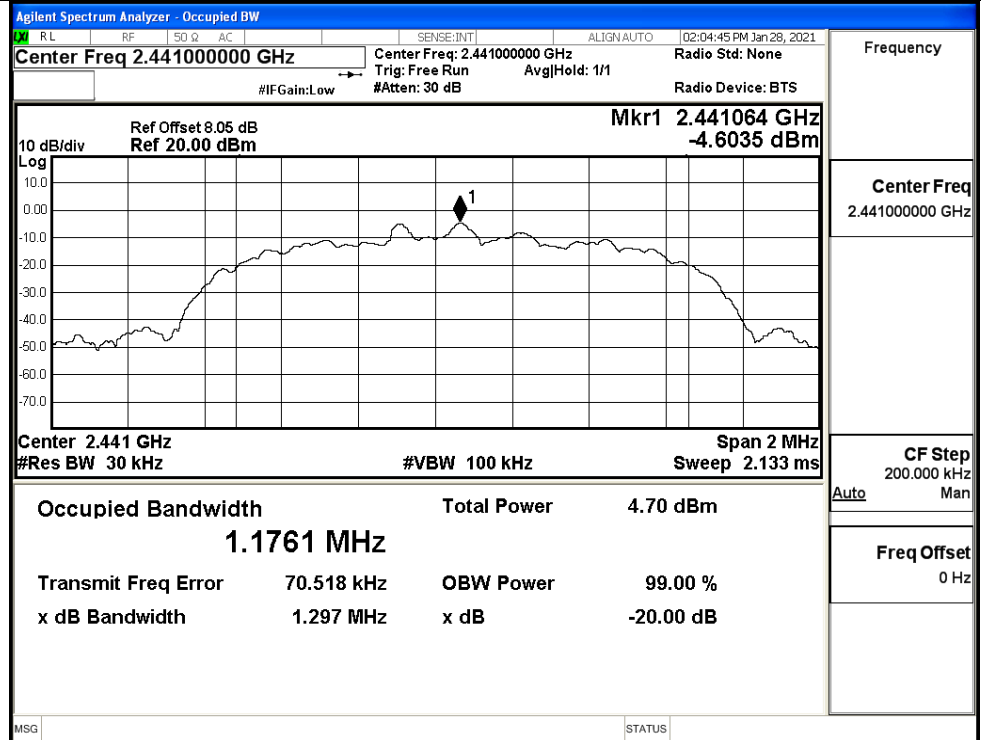
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

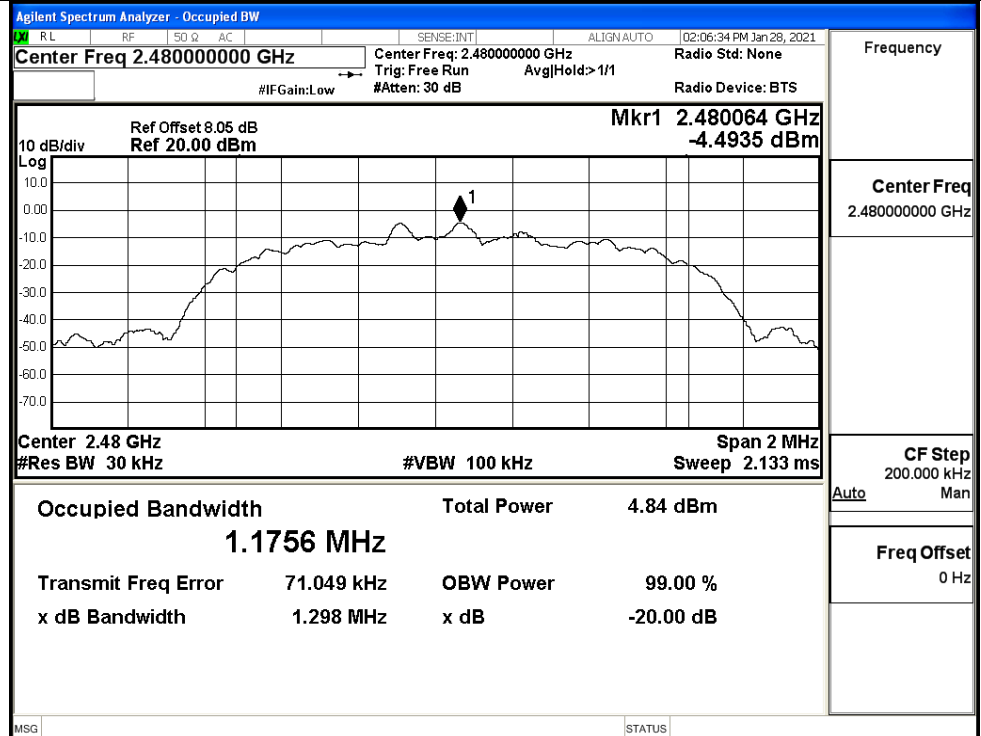
8DPSK/LCH



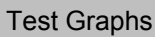
8DPSK/MCH



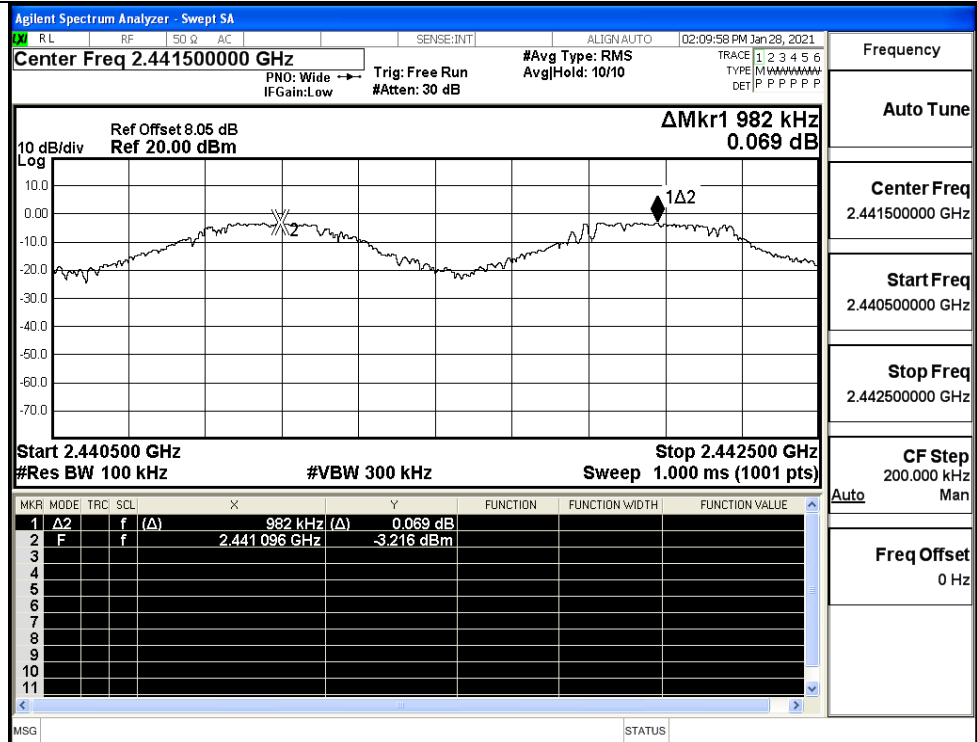
8DPSK/HCH



Mode	Channel.	Carrier Frequency Separation [MHz]	Limit [MHz]	Verdict
GFSK	LCH	1.078	0.638	PASS
	MCH	0.982	0.638	PASS
	HCH	0.808	0.638	PASS
$\pi/4$ DQPSK	LCH	1.110	0.856	PASS
	MCH	1.262	0.856	PASS
	HCH	1.110	0.856	PASS
8DPSK	LCH	1.226	0.865	PASS
	MCH	0.966	0.865	PASS
	HCH	1.242	0.865	PASS



GFSK/MCH



Frequency

Auto Tune

Center Freq

2.441500000 GHz

Start Freq

2.440500000 GHz

Stop Freq

2.442500000 GHz

CF Step

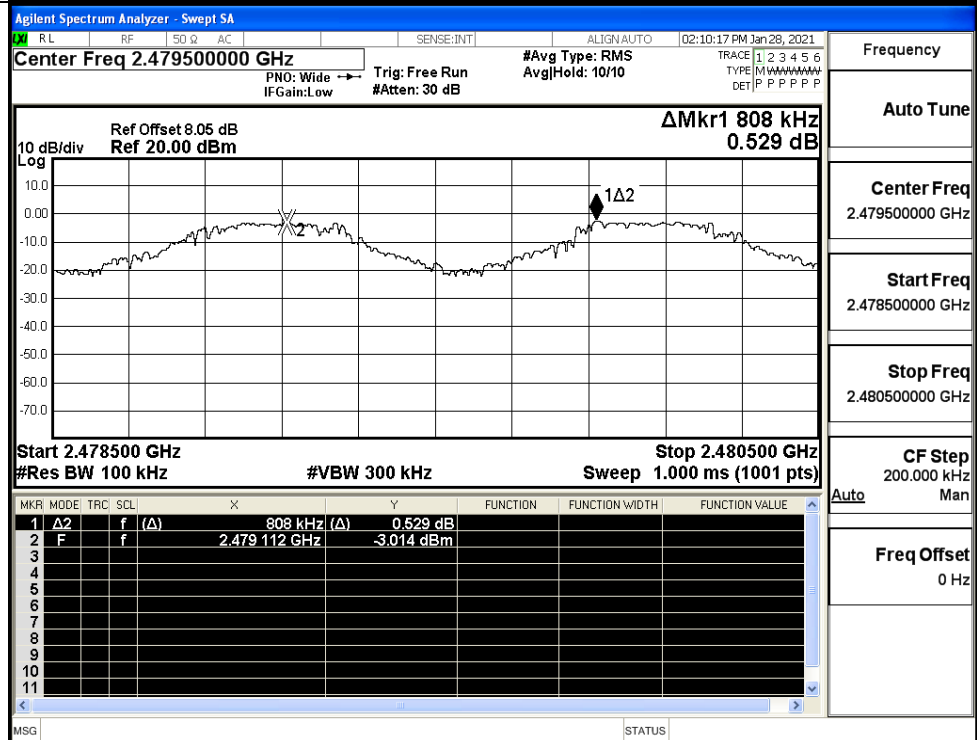
200.000 kHz

Man

Freq Offset

0 Hz

GFSK/HCH



Frequency

Auto Tune

Center Freq

2.479500000 GHz

Start Freq

2.478500000 GHz

Stop Freq

2.480500000 GHz

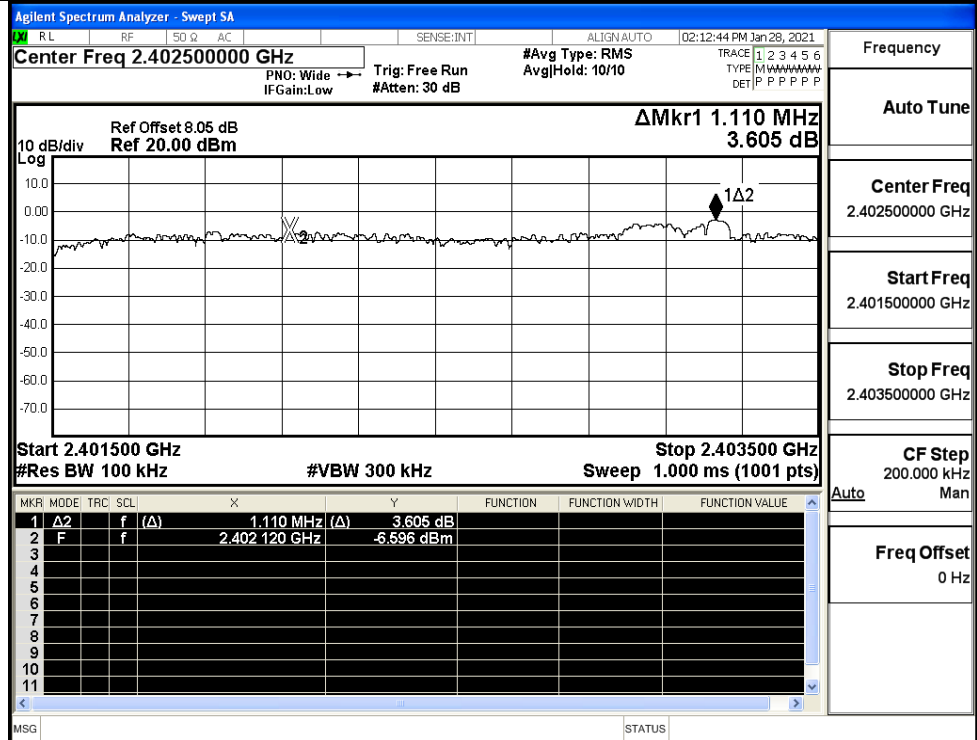
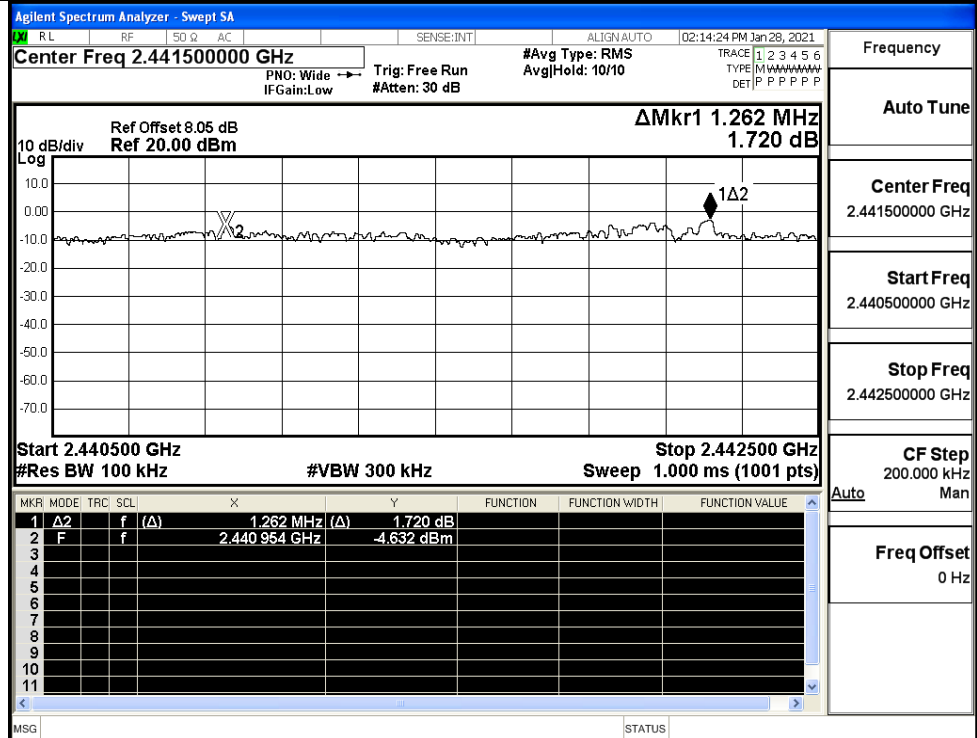
CF Step

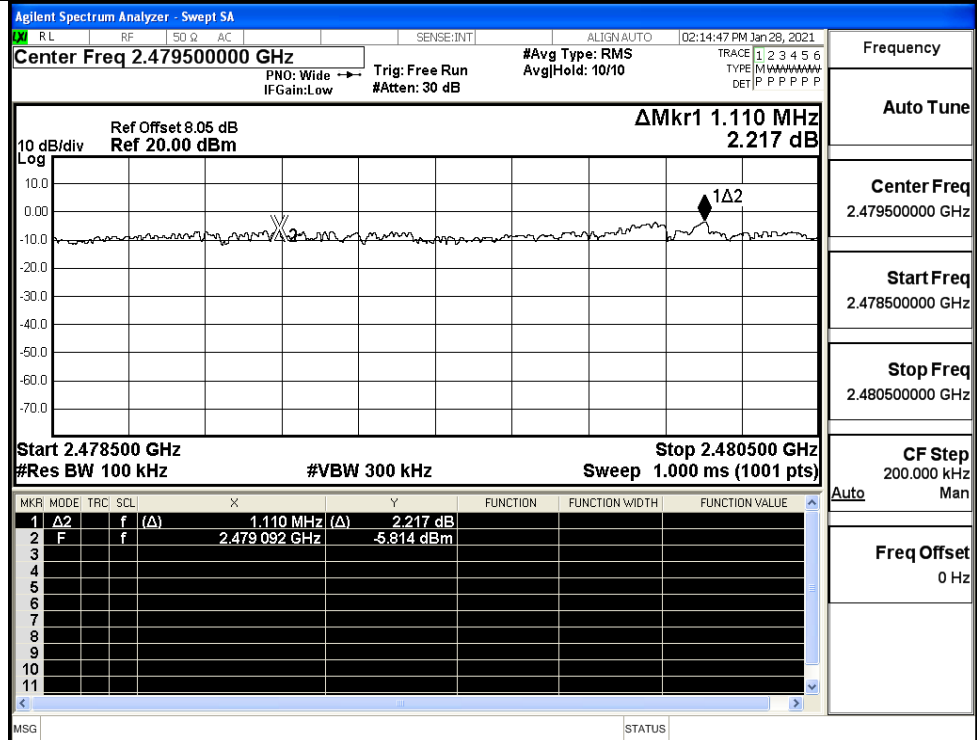
200.000 kHz

Man

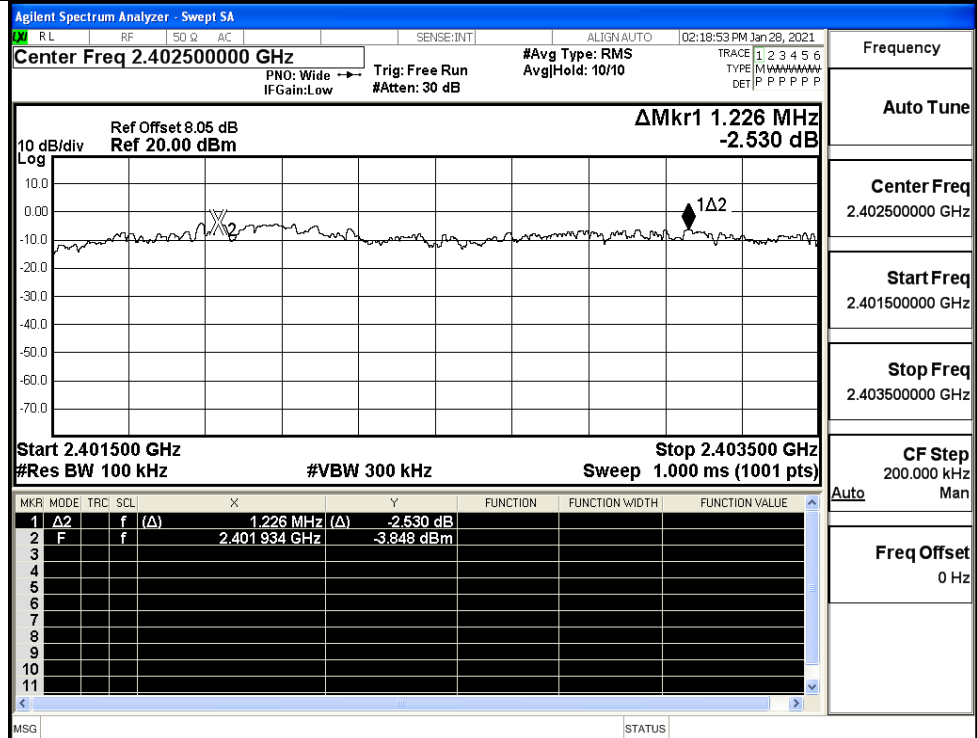
Freq Offset

0 Hz

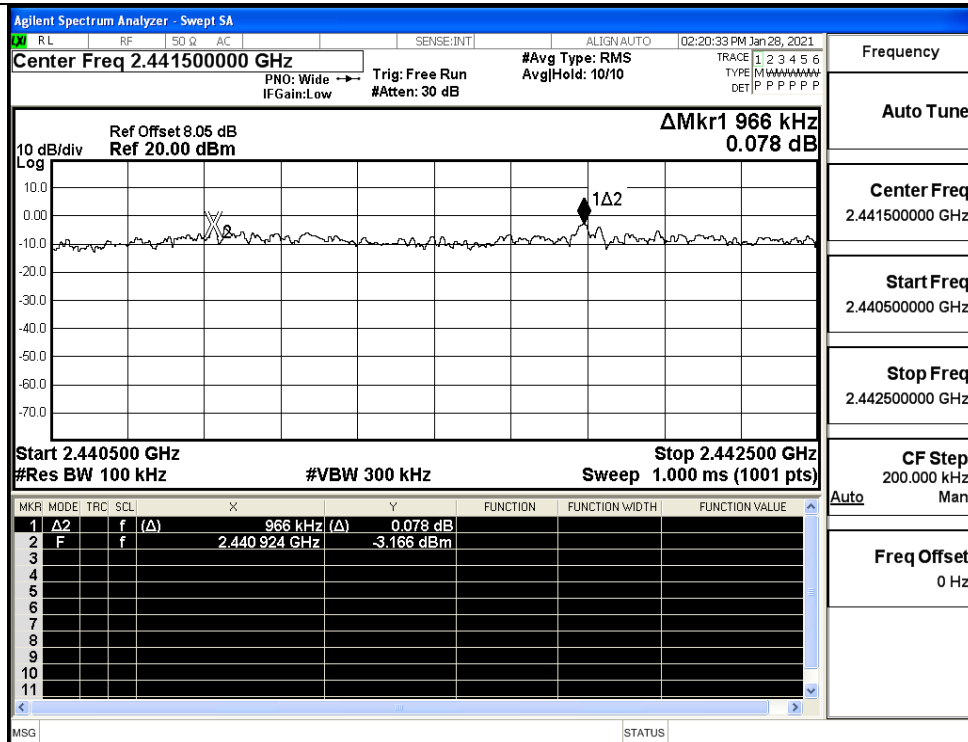
$\pi/4$ DQPSK/LCH $\pi/4$ DQPSK/MCH

$\pi/4$ DQPSK/HCH

8DPSK/LCH



8DPSK/MCH



Frequency

Auto Tune

Center Freq
2.441500000 GHz

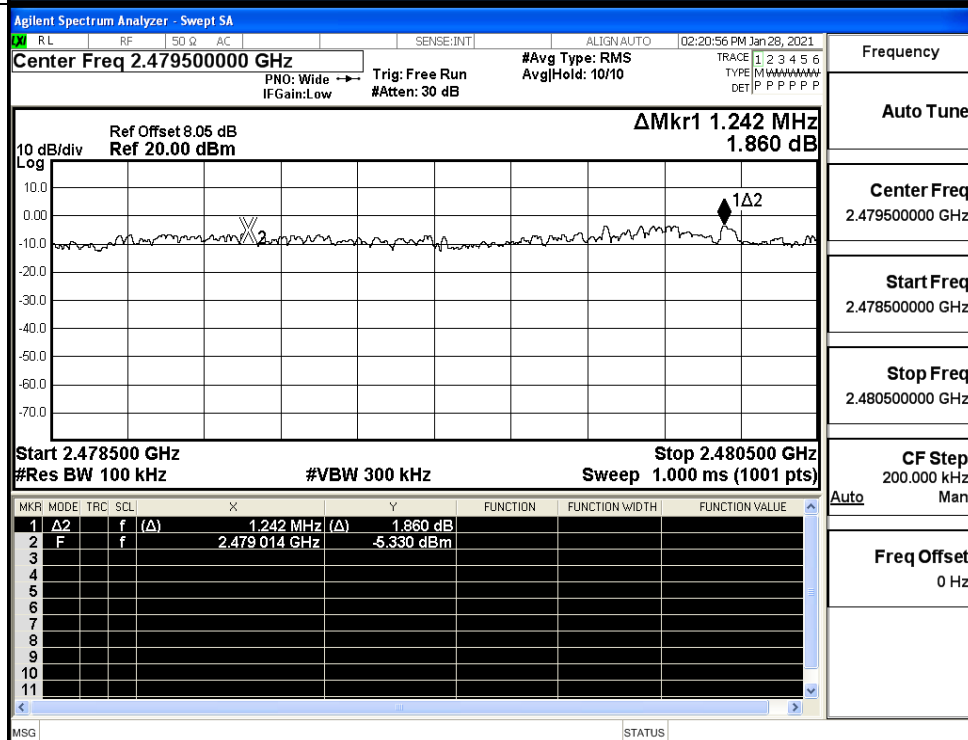
Start Freq
2.440500000 GHz

Stop Freq
2.442500000 GHz

CF Step
200.000 kHz
Man

Freq Offset
0 Hz

8DPSK/HCH



Frequency

Auto Tune

Center Freq
2.479500000 GHz

Start Freq
2.478500000 GHz

Stop Freq
2.480500000 GHz

CF Step
200.000 kHz
Man

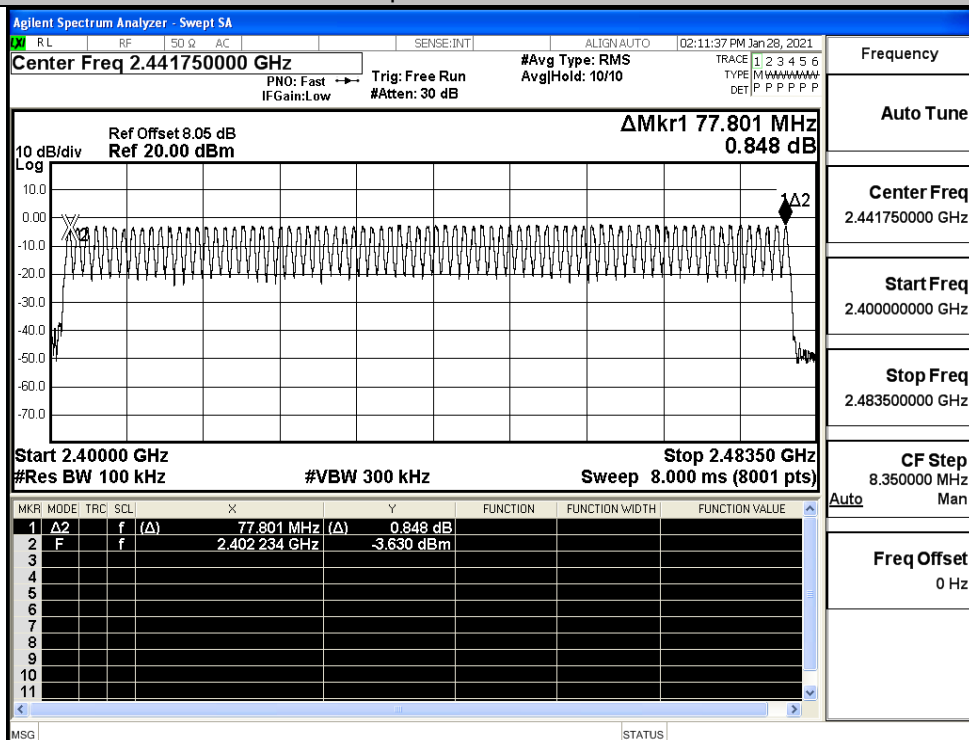
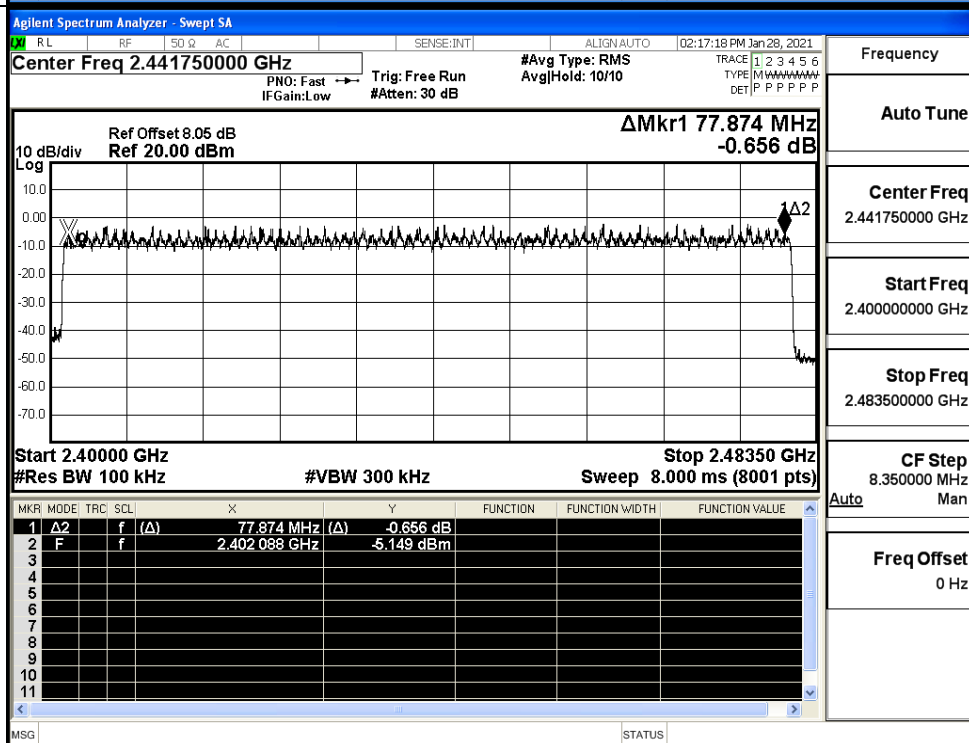
Freq Offset
0 Hz

A.4 Hopping Channel Number

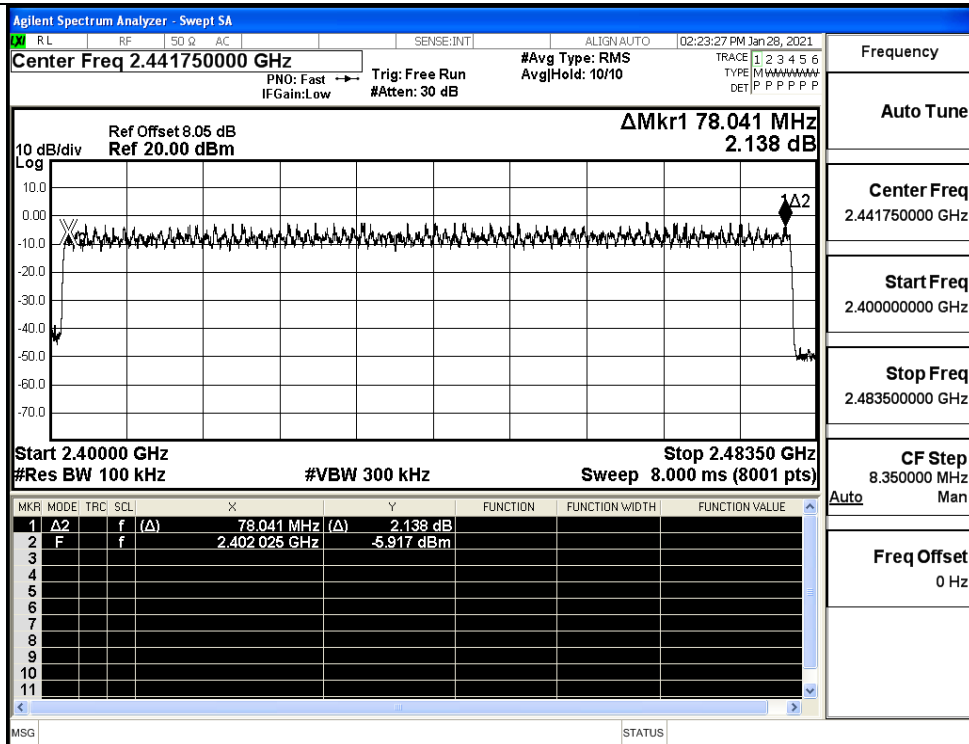
Mode	Channel.	Number of Hopping Channel [N]	Limit [N]	Verdict
GFSK	Hop	79	>=15	PASS
$\pi/4$ DQPSK	Hop	79	>=15	PASS
8DPSK	Hop	79	>=15	PASS

Test Graphs

GFSK/Hop

 $\pi/4$ DQPSK/Hop

8DPSK/Hop

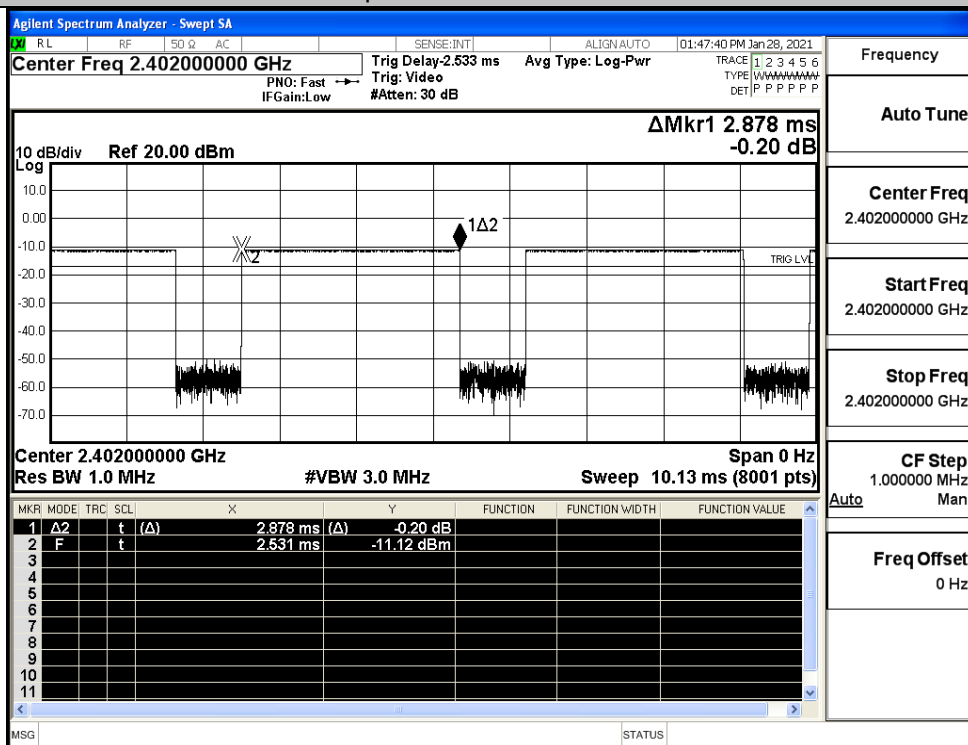


A.5 Dwell Time

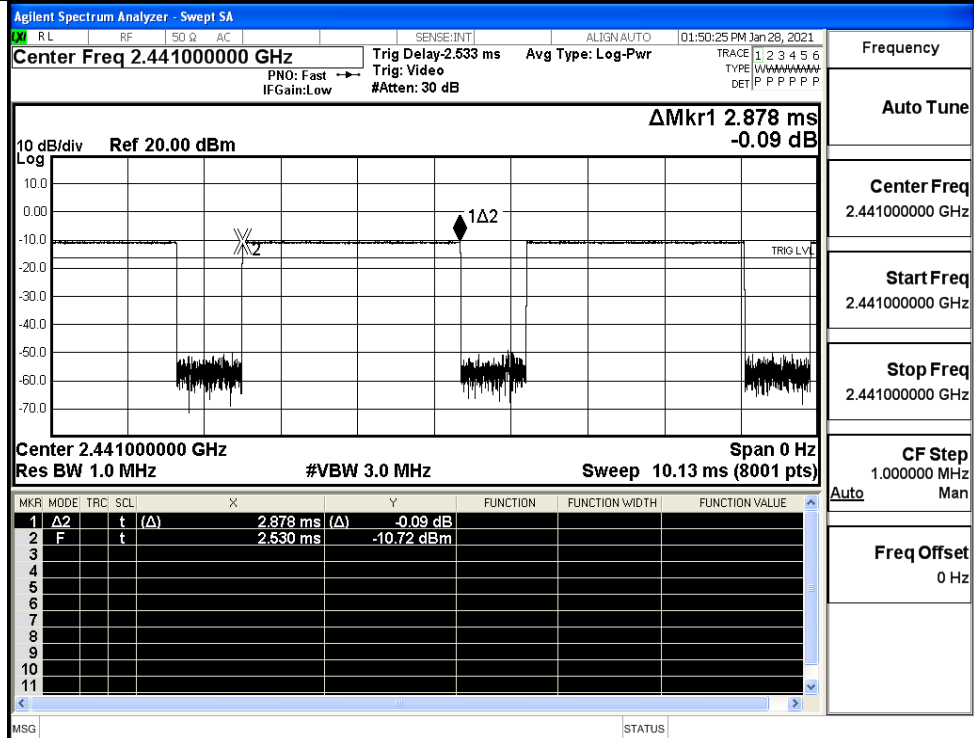
Mode	Packet	Channel	Burst Width [ms/hop/ch]	Total Hops[hop*ch]	Dwell Time[s]	Limit [s]	Verdict
GFSK	DH5	LCH	2.88	106.7	0.307	0.4	PASS
	DH5	MCH	2.88	106.7	0.307	0.4	PASS
	DH5	HCH	2.88	106.7	0.307	0.4	PASS
$\pi/4$ DQPSK	2DH5	LCH	2.88	106.7	0.307	0.4	PASS
	2DH5	MCH	2.88	106.7	0.307	0.4	PASS
	2DH5	HCH	2.88	106.7	0.307	0.4	PASS
8DPSK	3DH5	LCH	2.88	106.7	0.308	0.4	PASS
	3DH5	MCH	2.88	106.7	0.308	0.4	PASS
	3DH5	HCH	2.88	106.7	0.308	0.4	PASS

Test Graphs

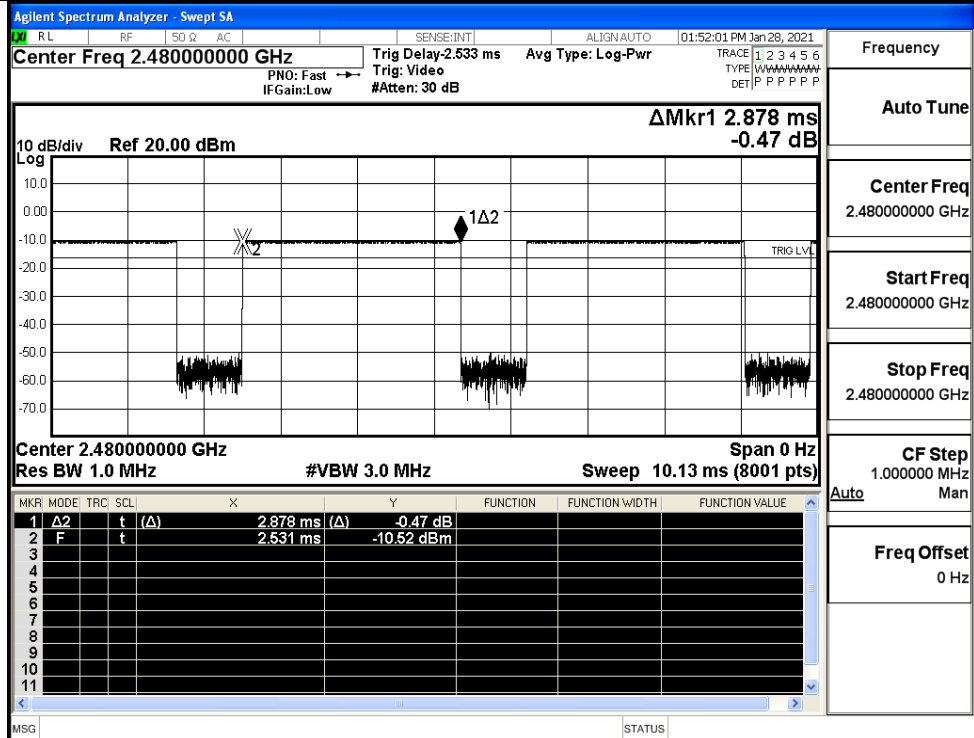
GFSK_DH5/LCH



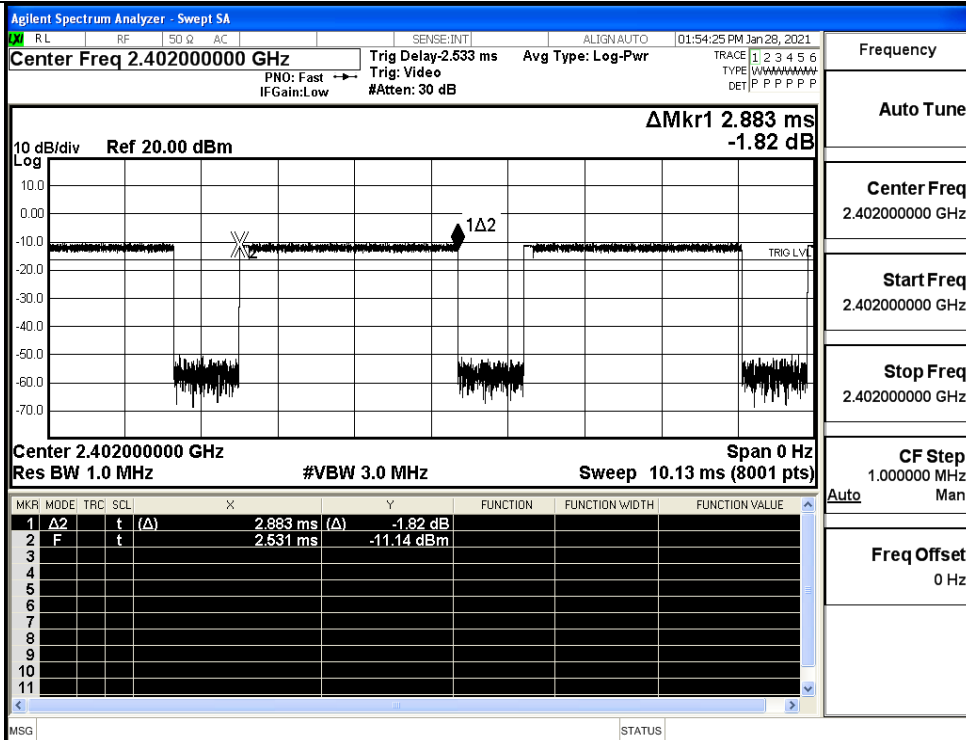
GFSK_DH5/MCH



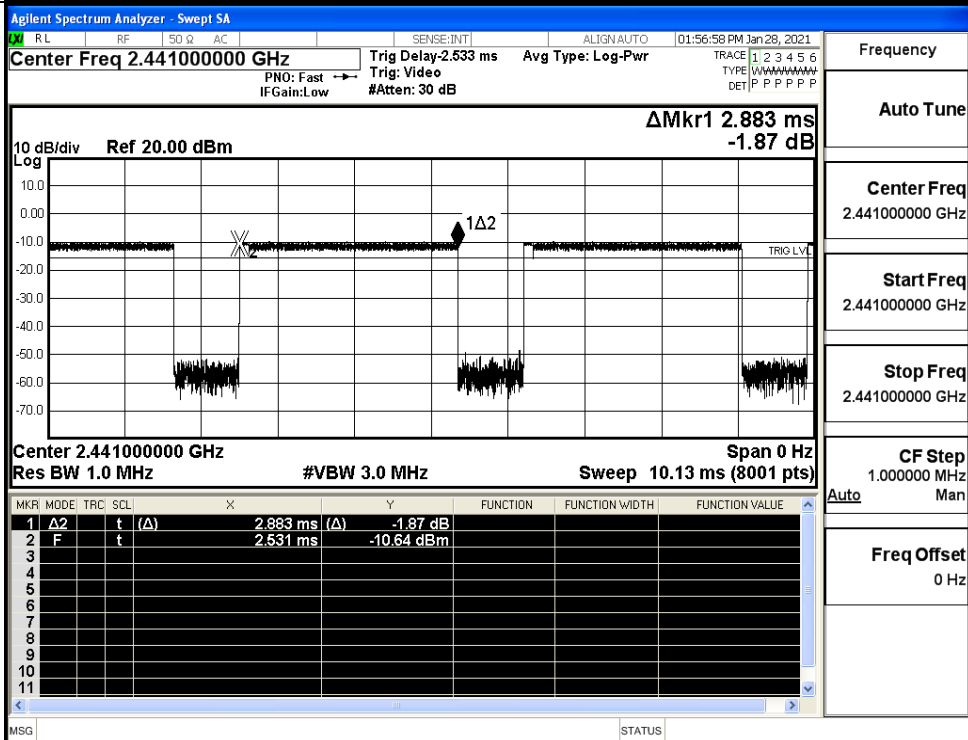
GFSK_DH5/HCH



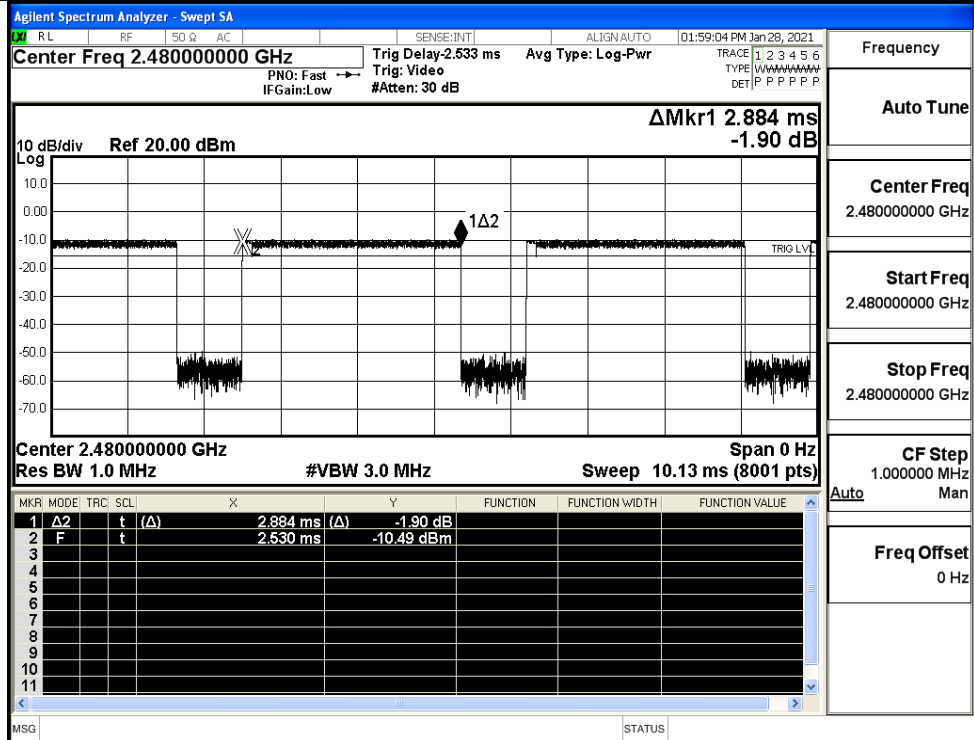
$\pi/4$ DQPSK
_2DH5/LCH



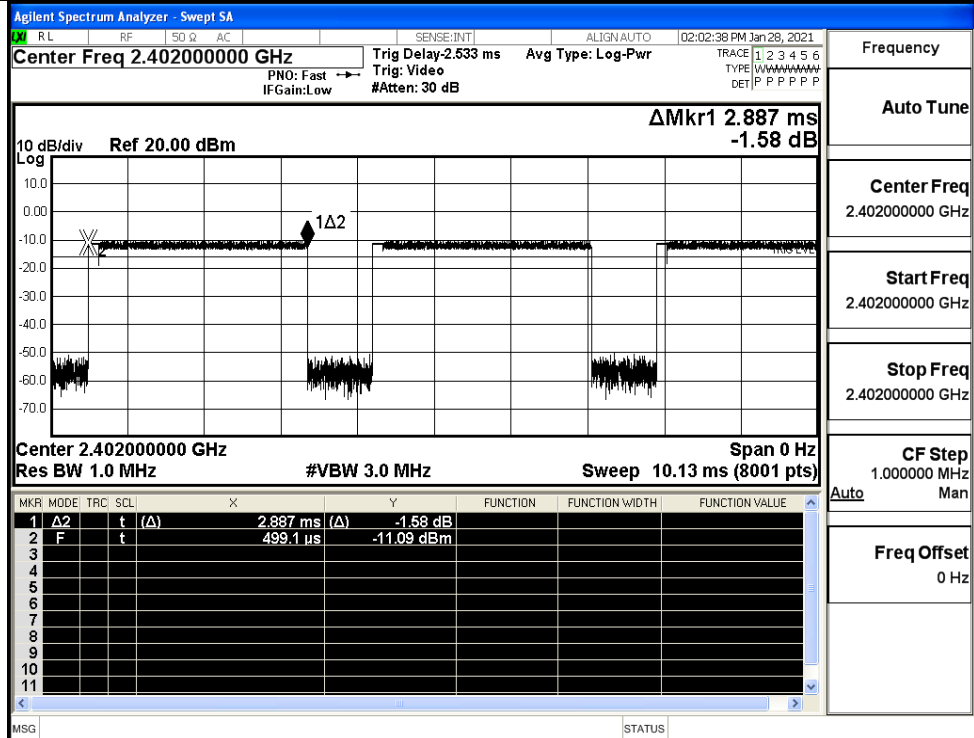
$\pi/4$ DQPSK
_2DH5/MCH



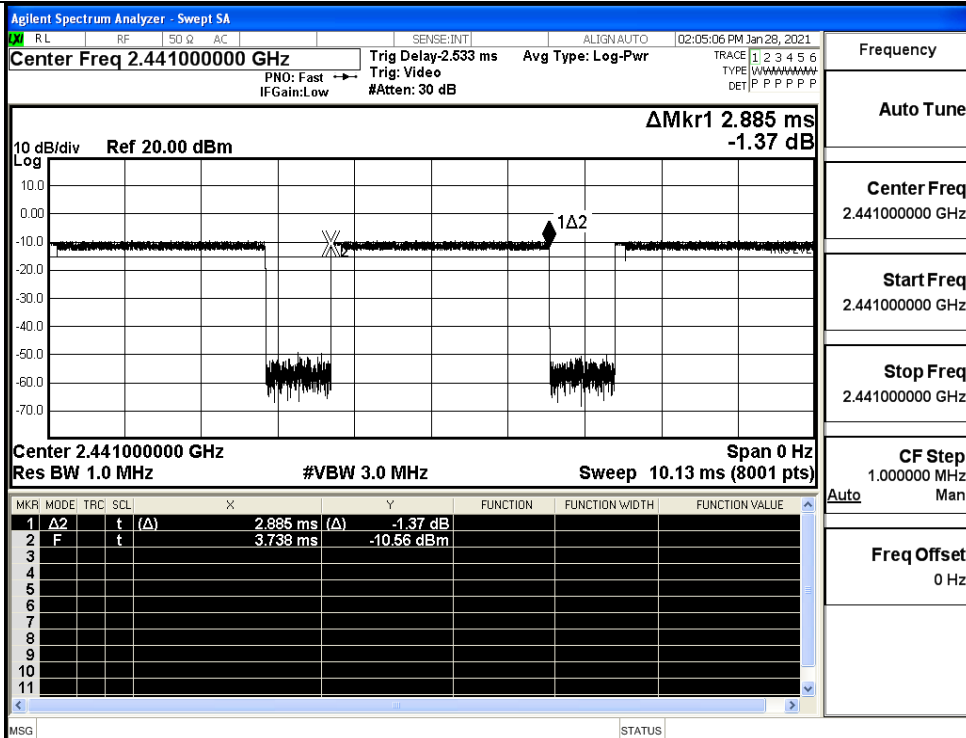
$\pi/4$ DQPSK
_2DH5/HCH



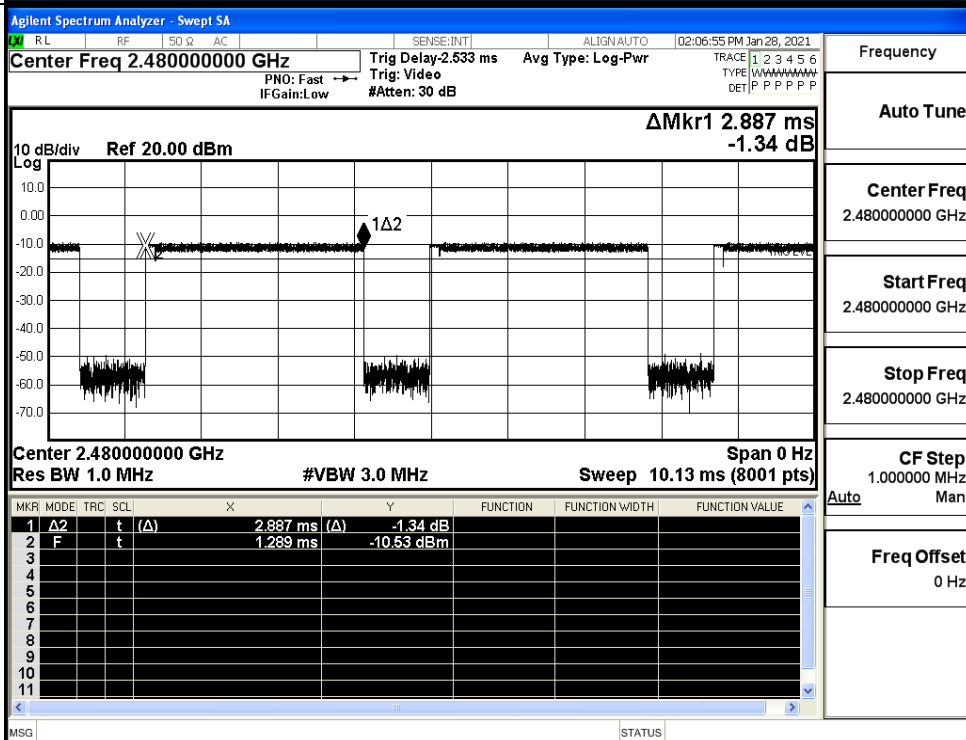
8DPSK _3DH5/LCH



8DPSK_3DH5/MCH



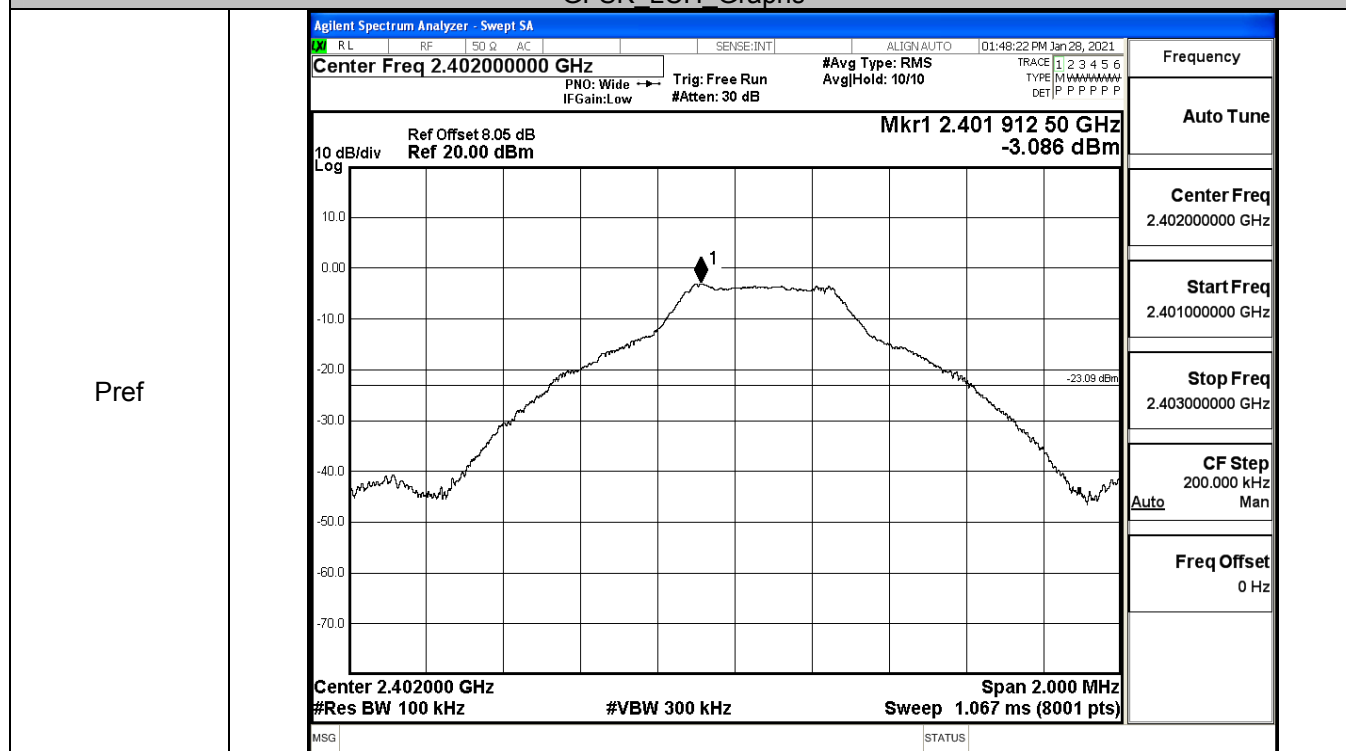
8DPSK_3DH5/HCH

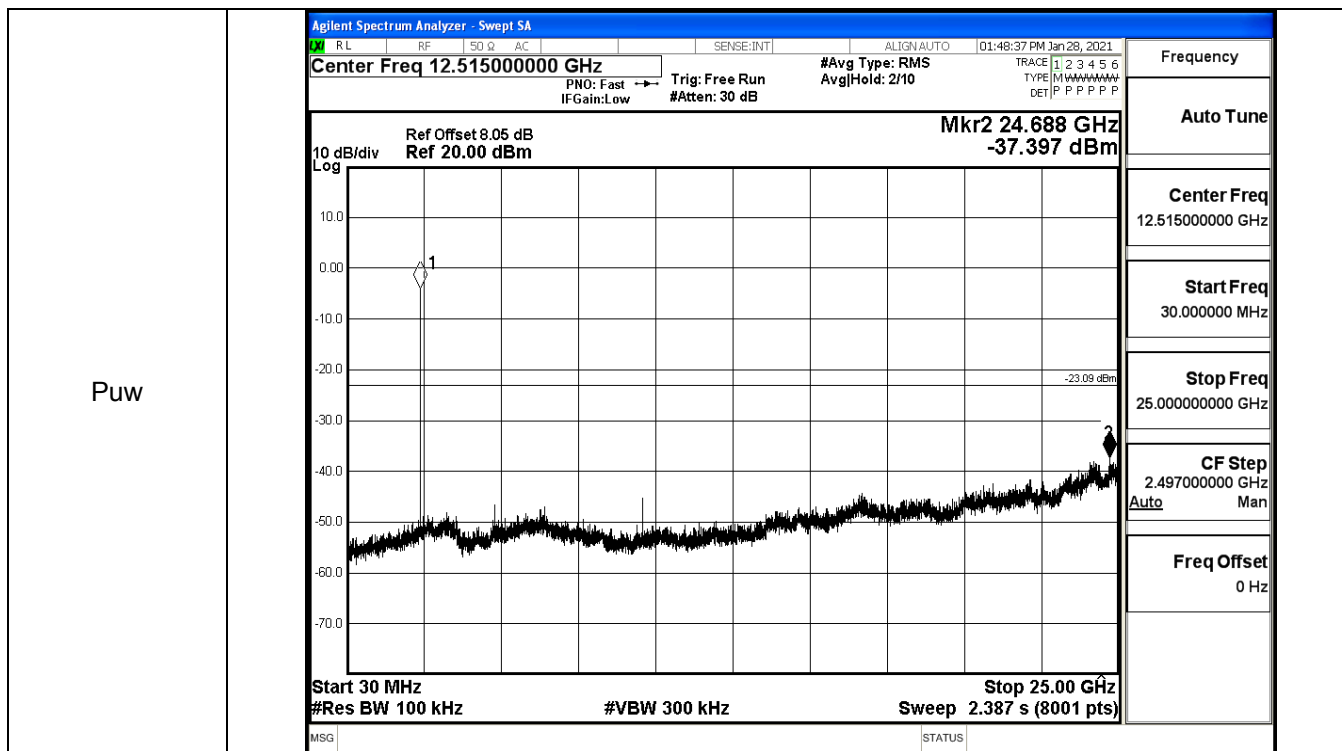


A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	-3.086	-37.397	-23.086	PASS
	MCH	-2.612	-37.648	-22.612	PASS
	HCH	-2.665	-37.889	-22.665	PASS
$\pi/4$ DQPSK	LCH	-3.13	-37.478	-23.130	PASS
	MCH	-2.625	-35.415	-22.625	PASS
	HCH	-2.443	-37.918	-22.443	PASS
8DPSK	LCH	-2.972	-38.529	-22.972	PASS
	MCH	-2.602	-37.531	-22.602	PASS
	HCH	-2.775	-36.587	-22.775	PASS

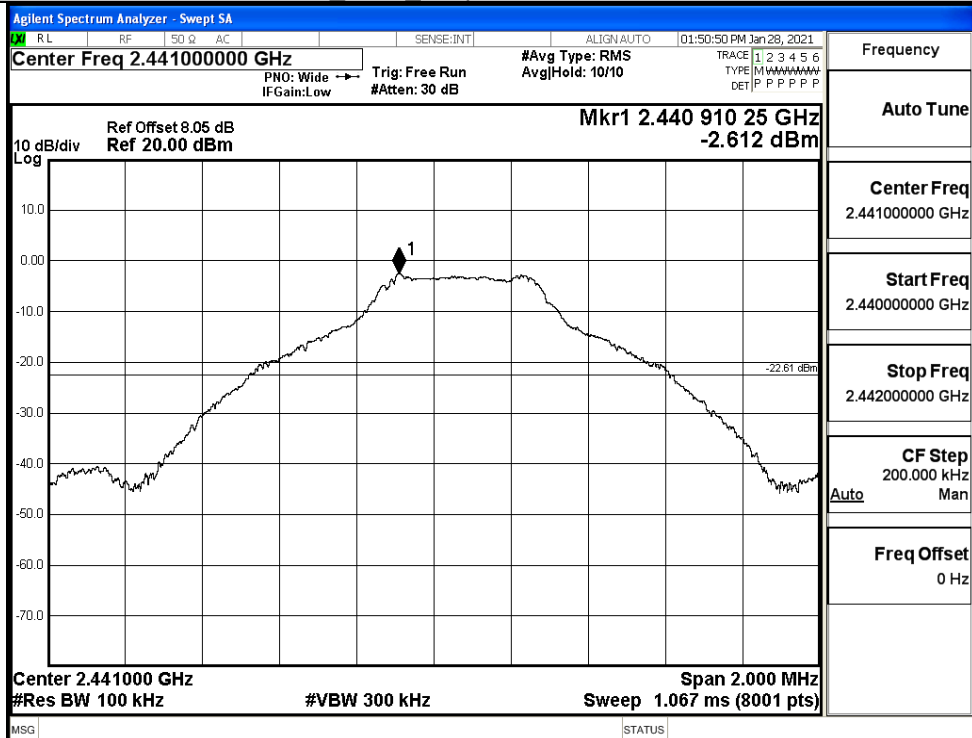
GFSK LCH Graphs



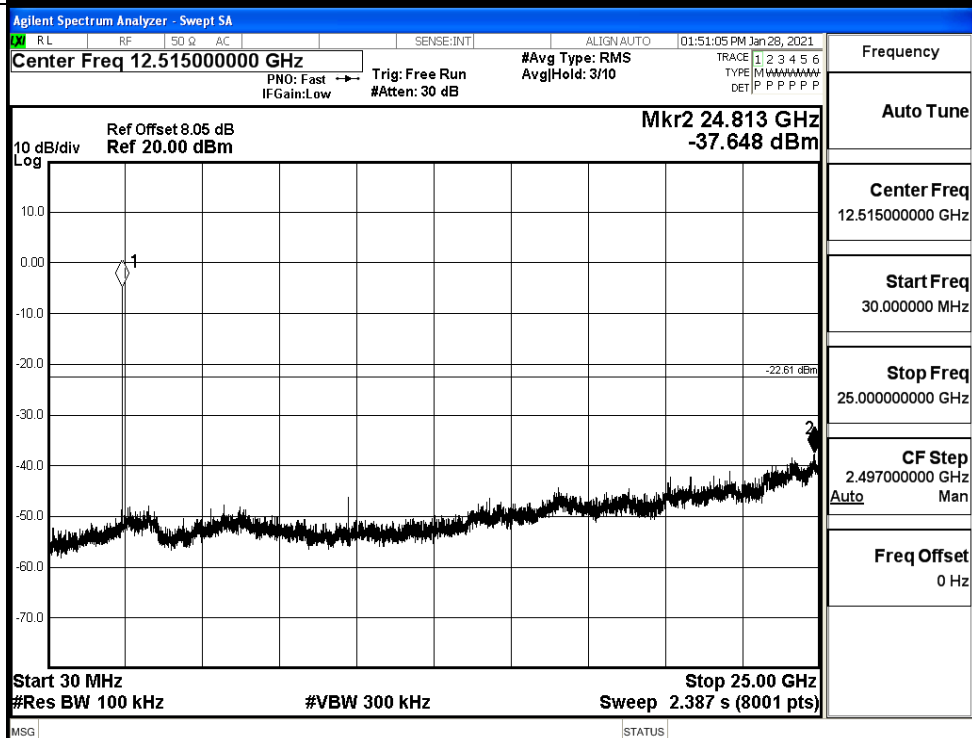


GFSK_MCH_Graphs

Pref

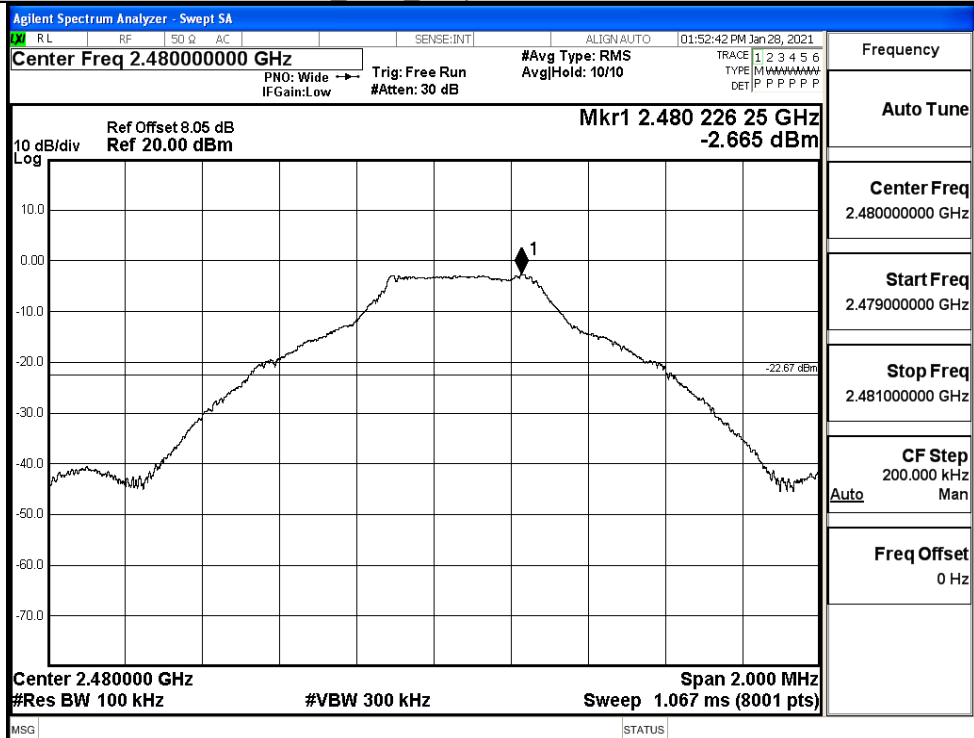


Puw

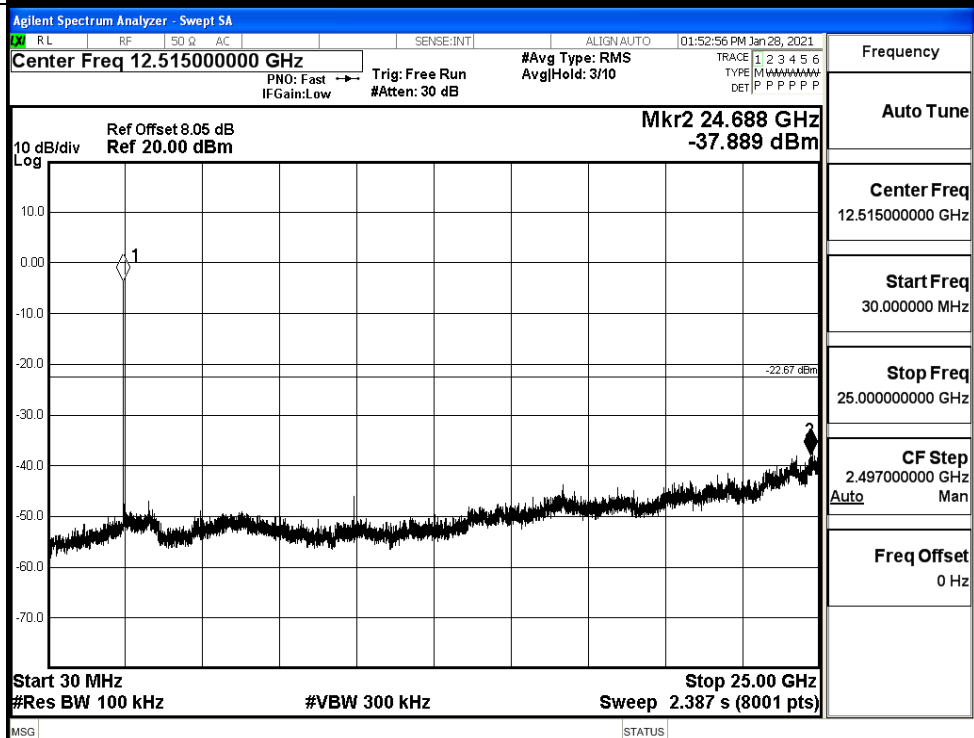


GFSK_HCH_Graphs

Pref

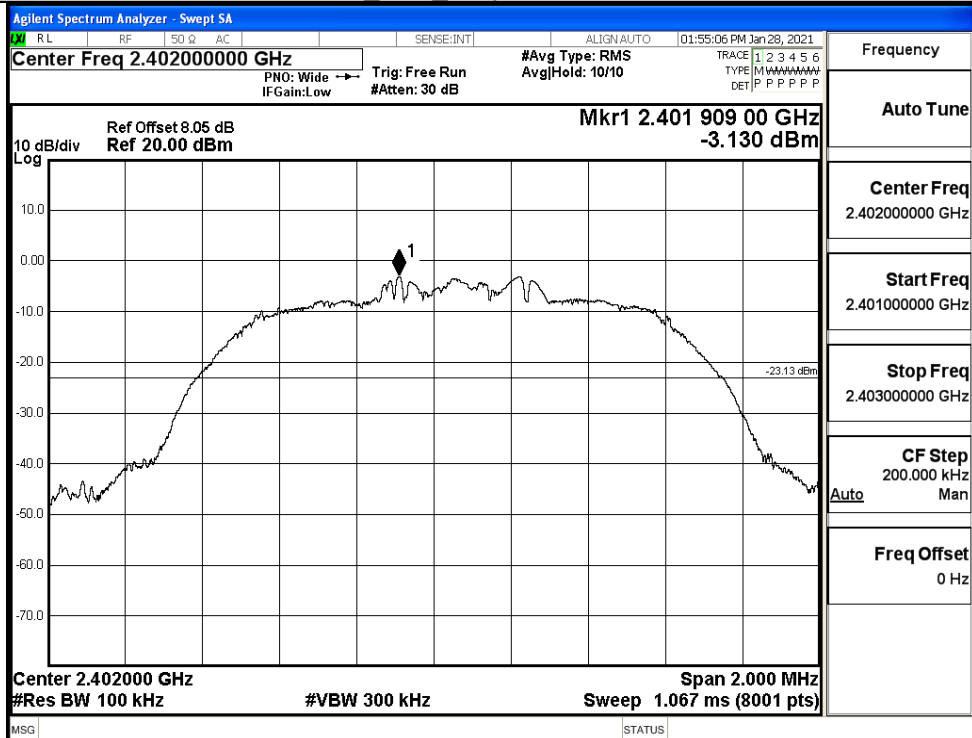


Puw

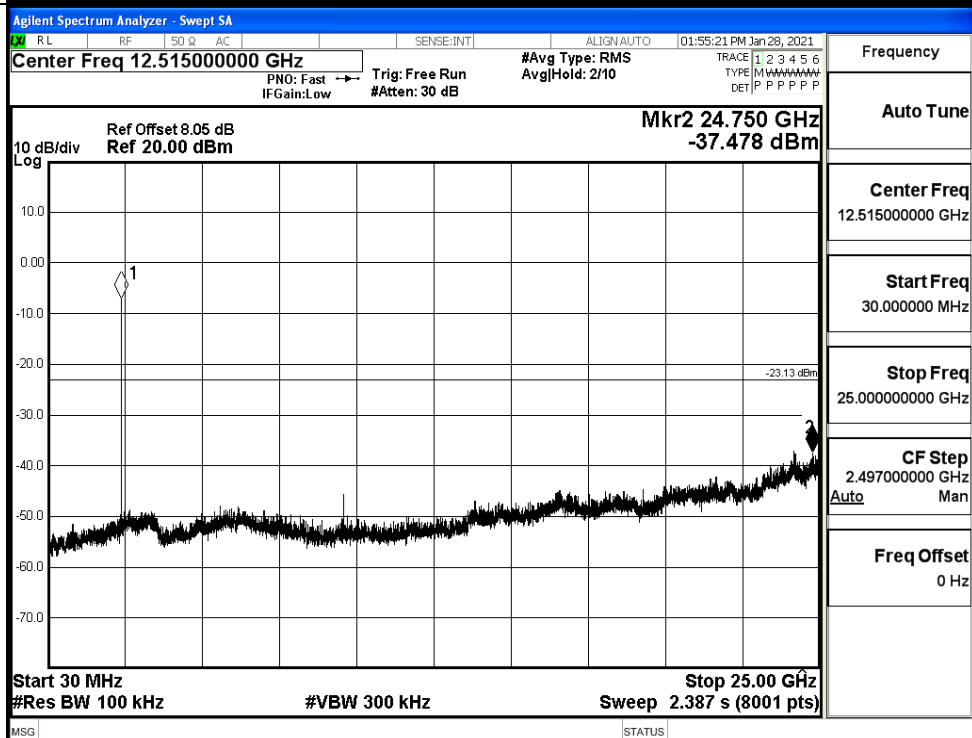


$\pi/4$ DQPSK_LCH_Graphs

Pref

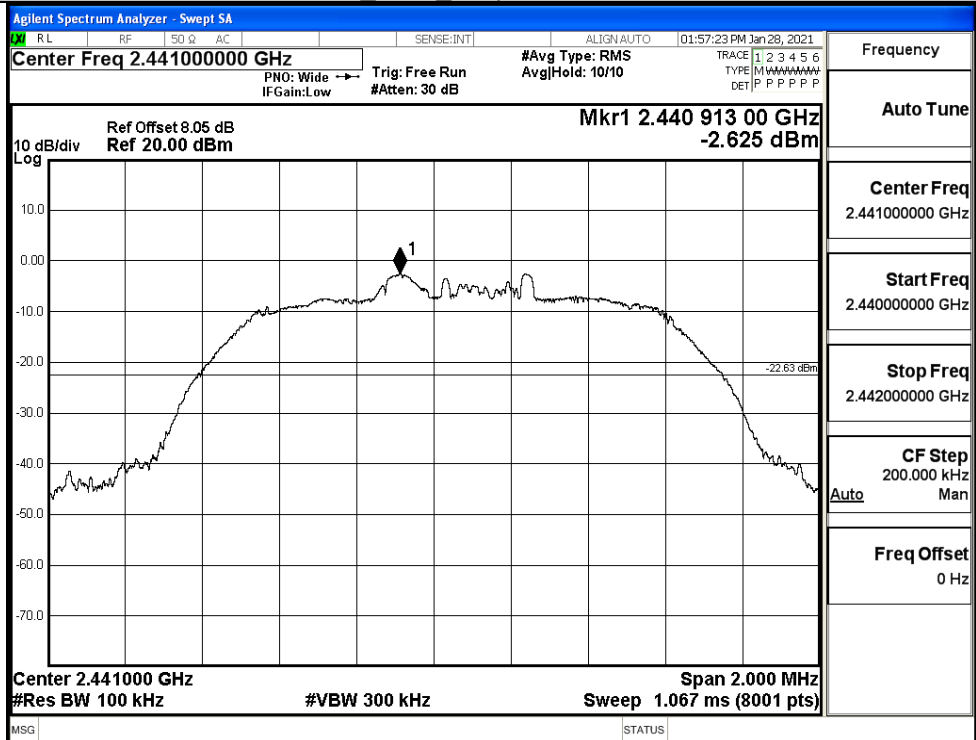


Puw

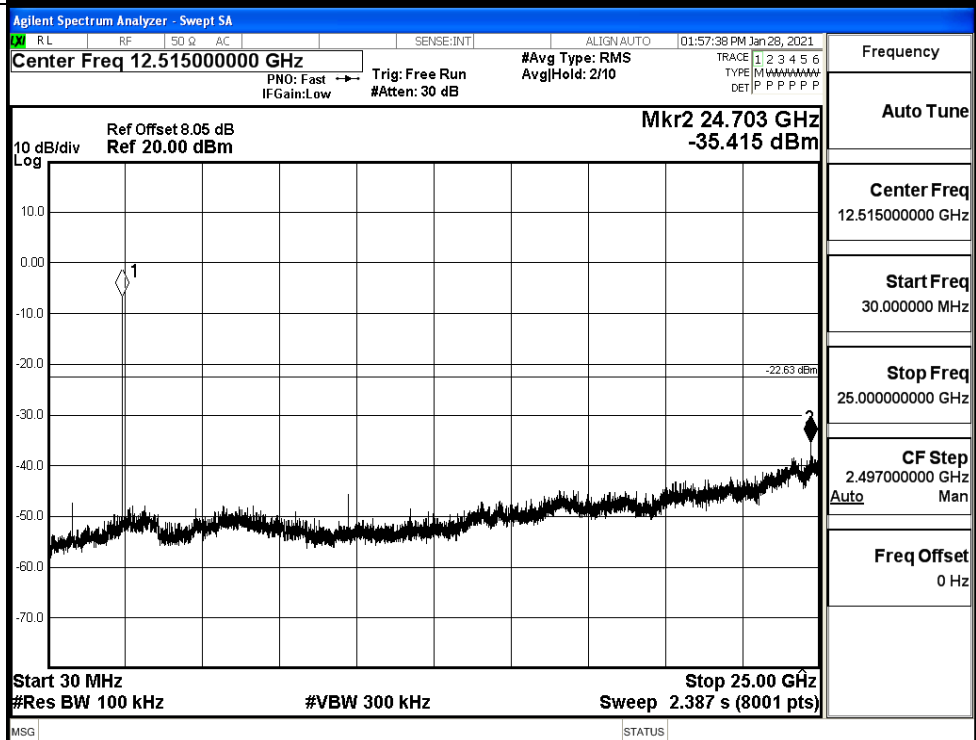


$\pi/4$ DQPSK_MCH_Graphs

Pref

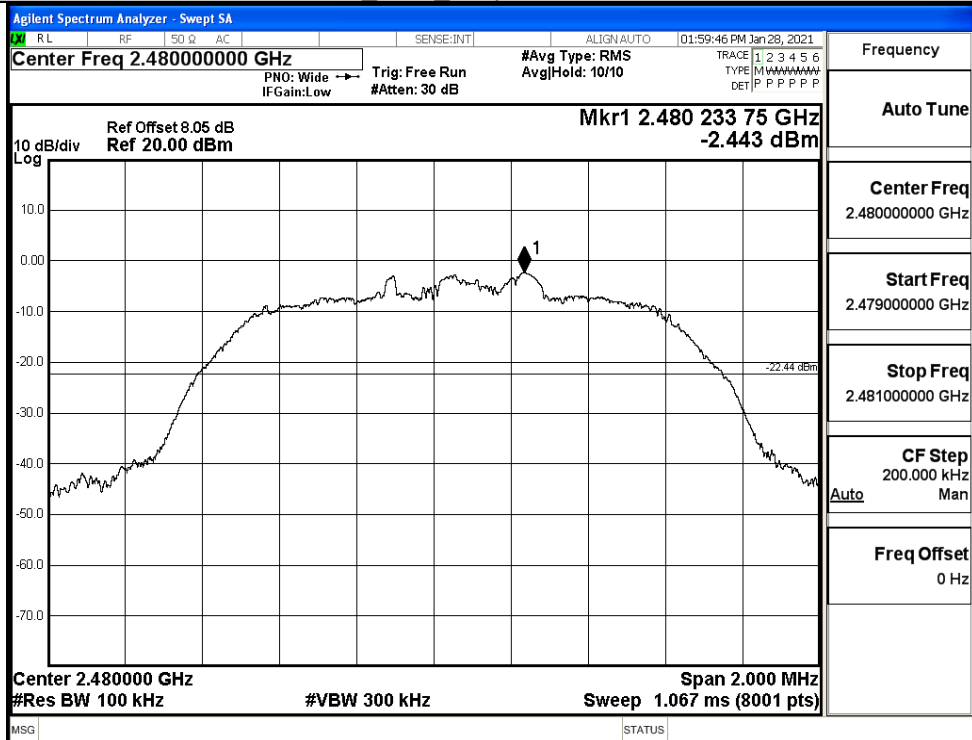


Puw

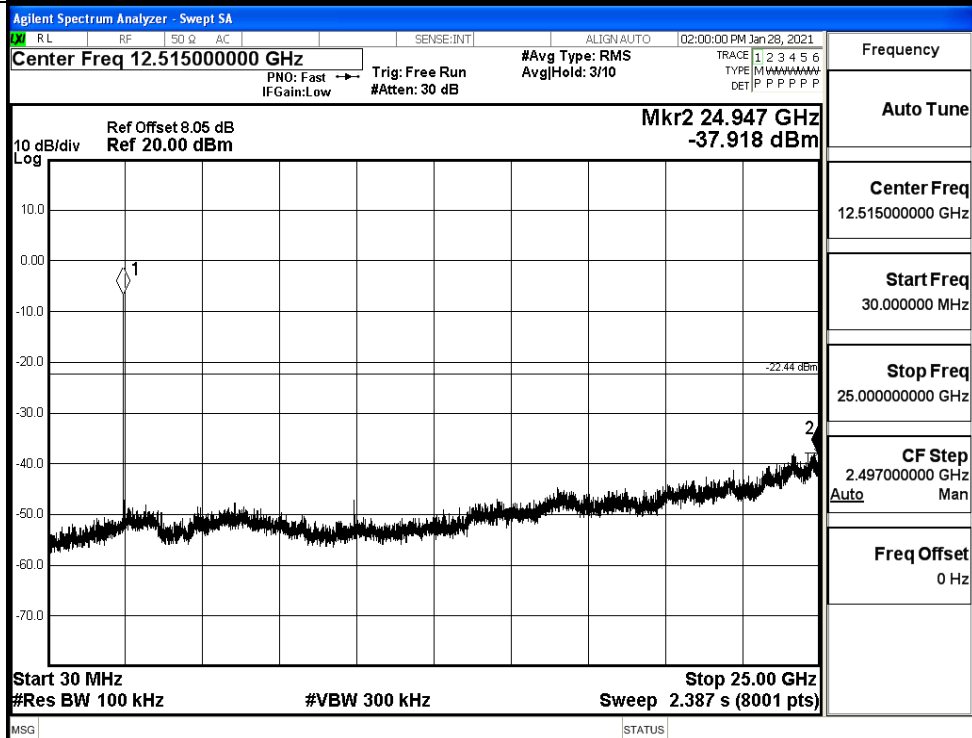


π /4DQPSK_HCH_Graphs

Pref

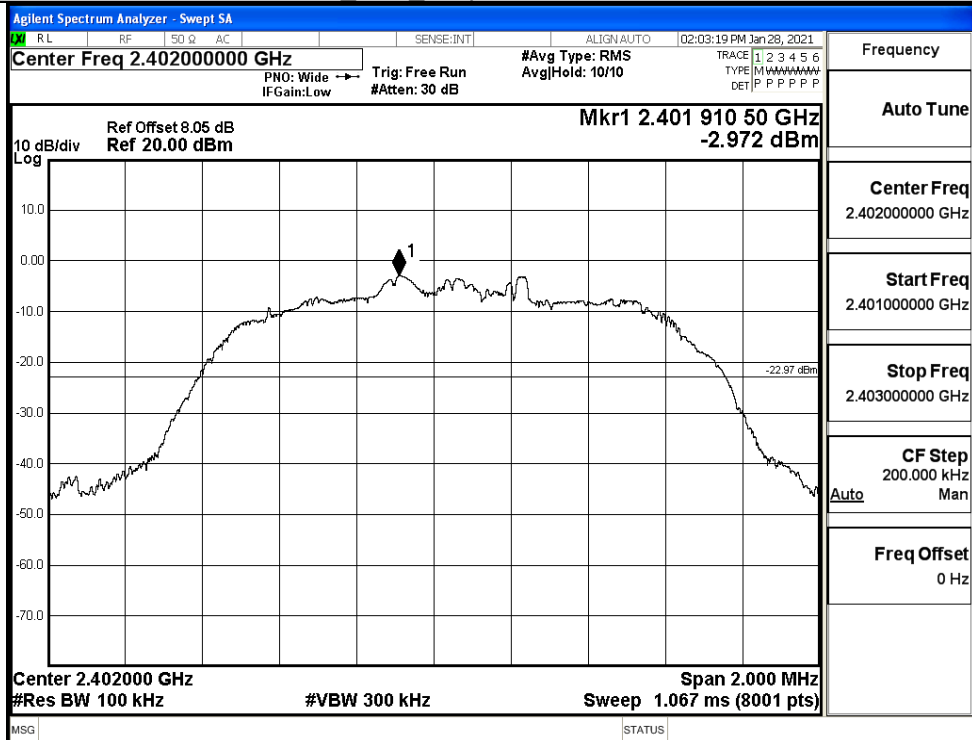


Puw

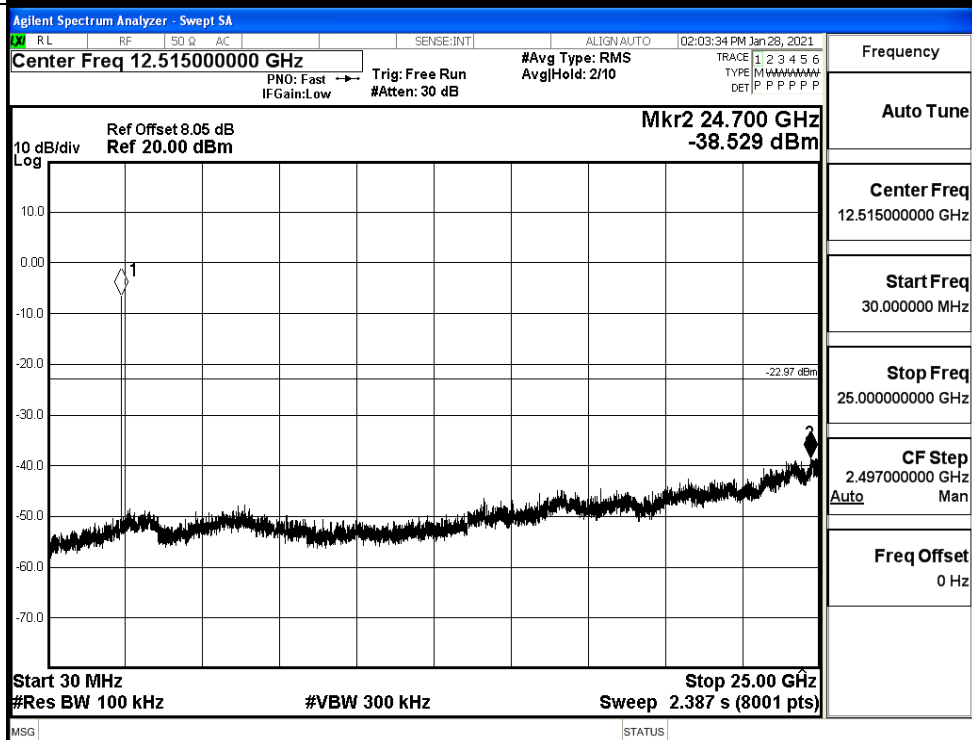


8DPSK_LCH_Graphs

Pref

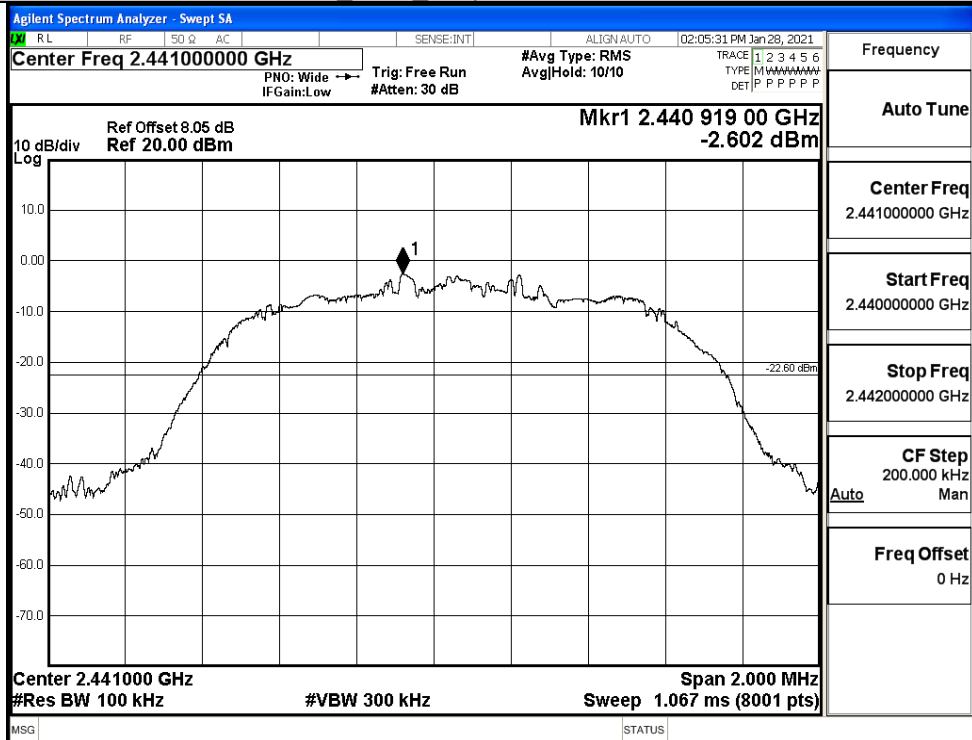


Puw

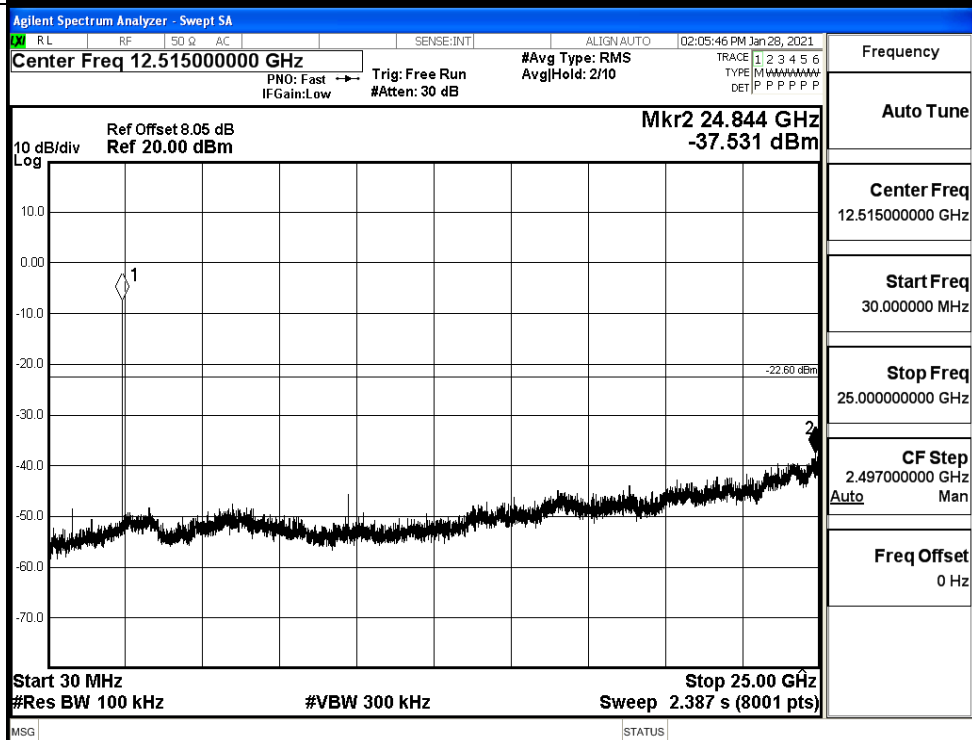


8DPSK_MCH_Graphs

Pref

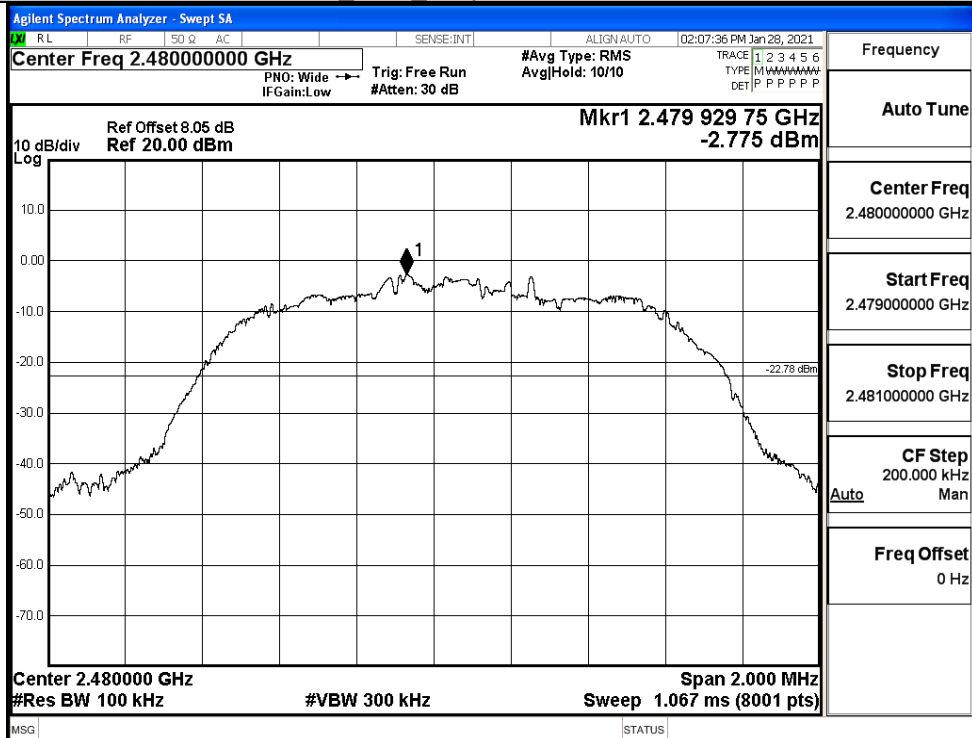


Puw

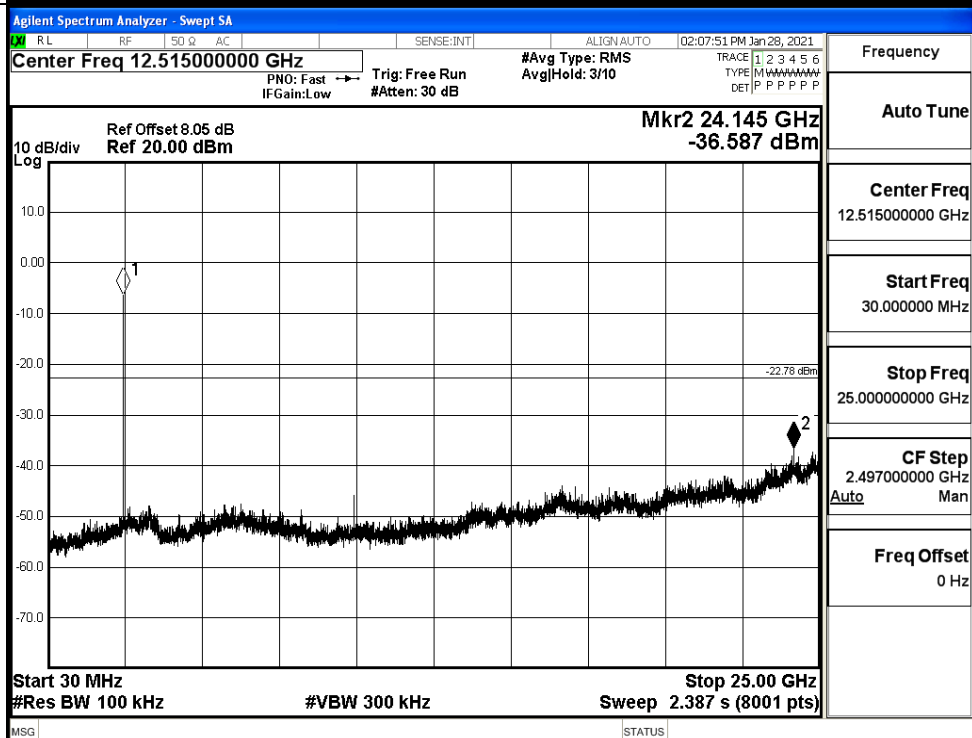


8DPSK_HCH_Graphs

Pref



Puw

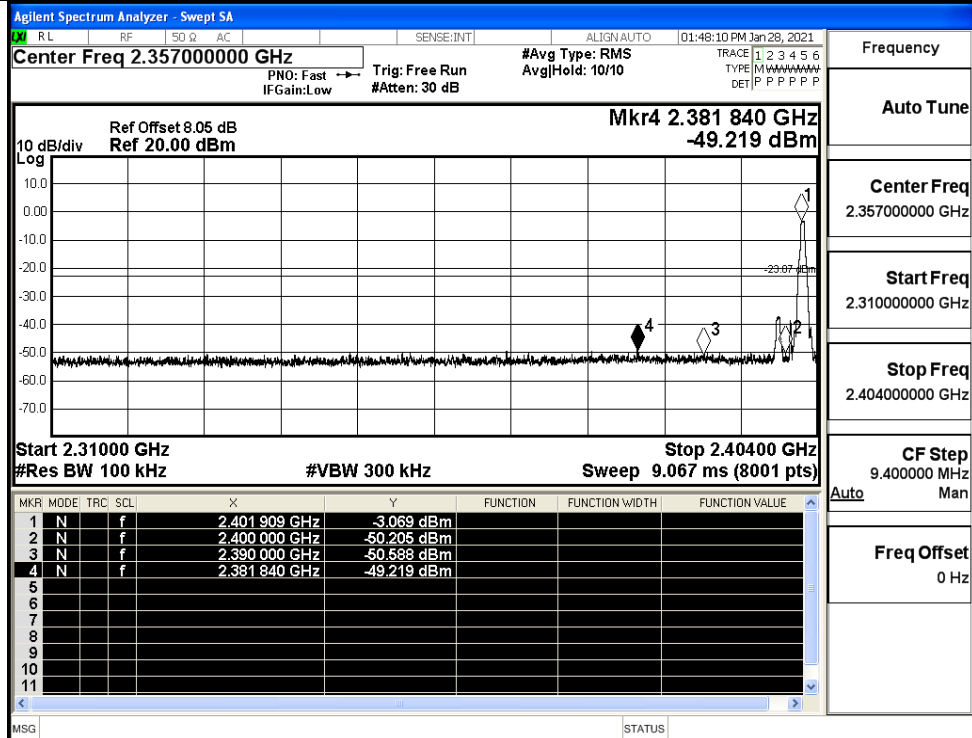


A.7 Band-edge for RF Conducted Emissions

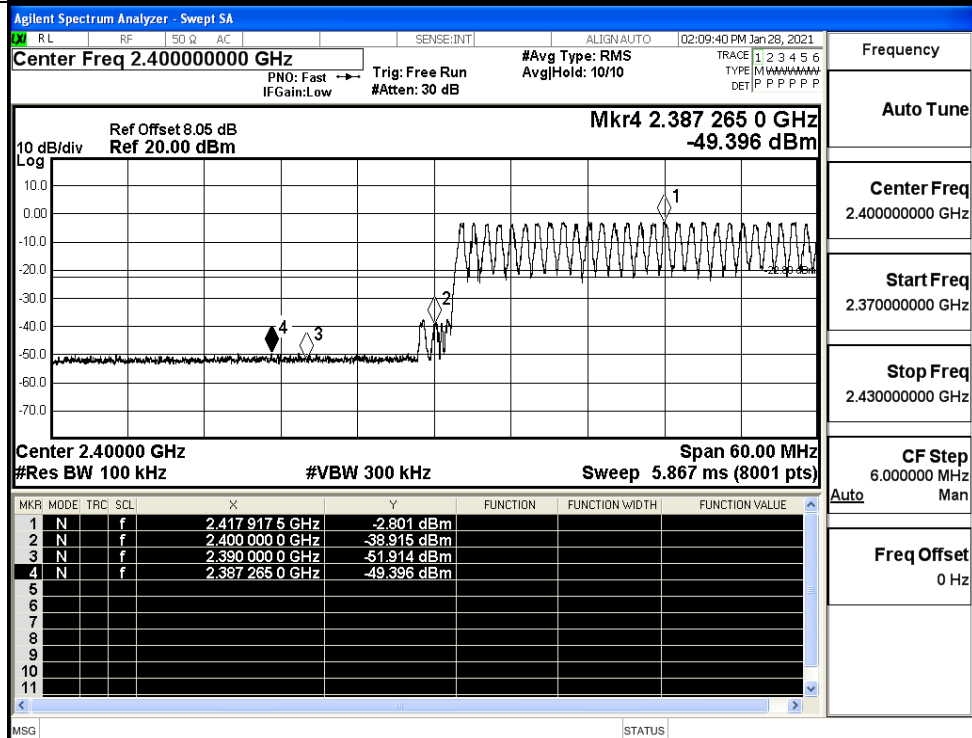
Mode	Channel	Carrier Frequency [MHz]	Carrier Power [dBm]	Frequency Hopping	Max Spurious Level [dBm]	Limit [dBm]	Verdict
GFSK	LCH	2402	-3.069	Off	-49.219	-23.07	PASS
			-2.801	On	-49.396	-22.8	PASS
	HCH	2480	-2.619	Off	-45.235	-22.62	PASS
			-2.395	On	-48.876	-22.4	PASS
$\pi/4$ DQPSK	LCH	2402	-3.054	Off	-49.412	-23.05	PASS
			-2.663	On	-47.748	-22.66	PASS
	HCH	2480	-2.357	Off	-46.412	-22.36	PASS
			-2.269	On	-45.567	-22.27	PASS
8DPSK	LCH	2402	-3.036	Off	-49.435	-23.04	PASS
			-2.850	On	-48.529	-22.85	PASS
	HCH	2480	-2.519	Off	-48.137	-22.52	PASS
			-2.330	On	-48.308	-22.33	PASS

Test Graphs

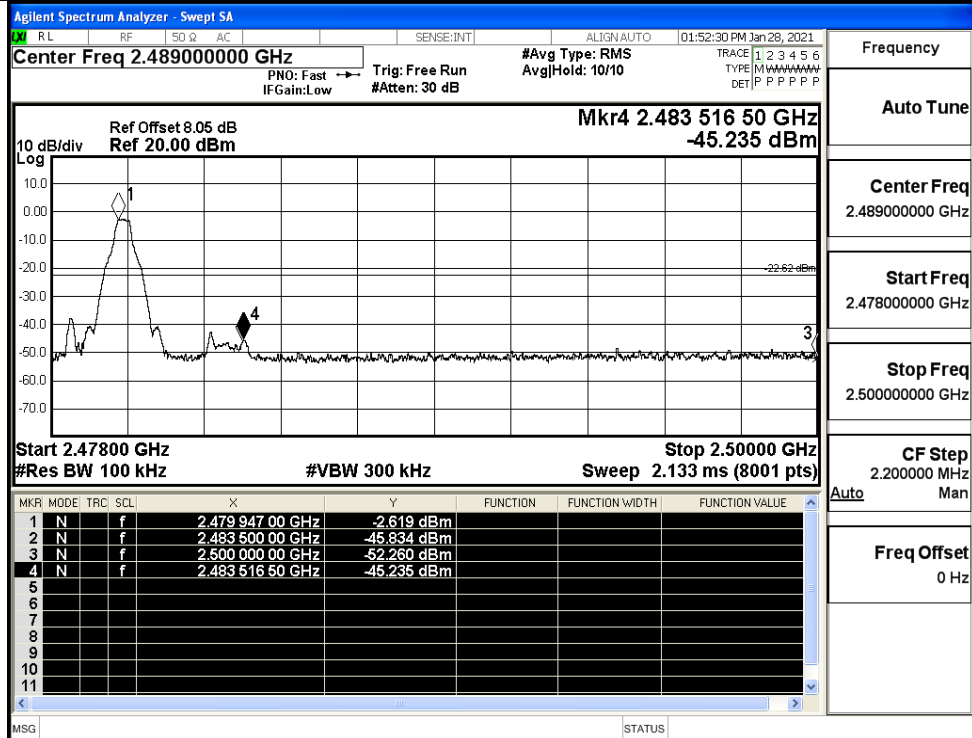
GFSK/LCH/No Hop



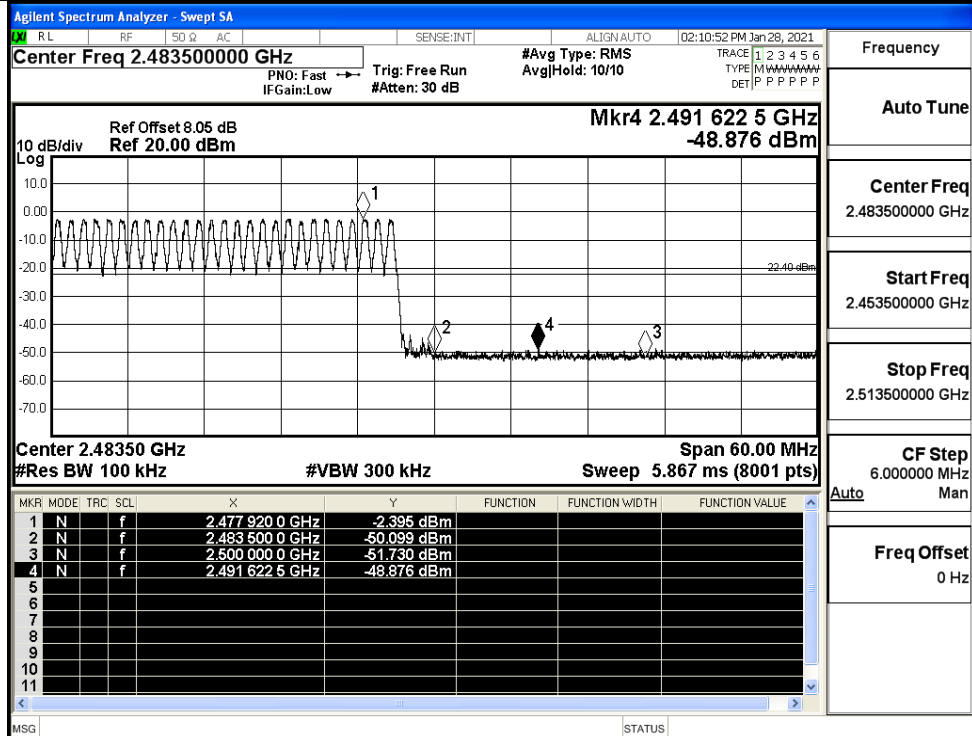
GFSK/LCH/Hop



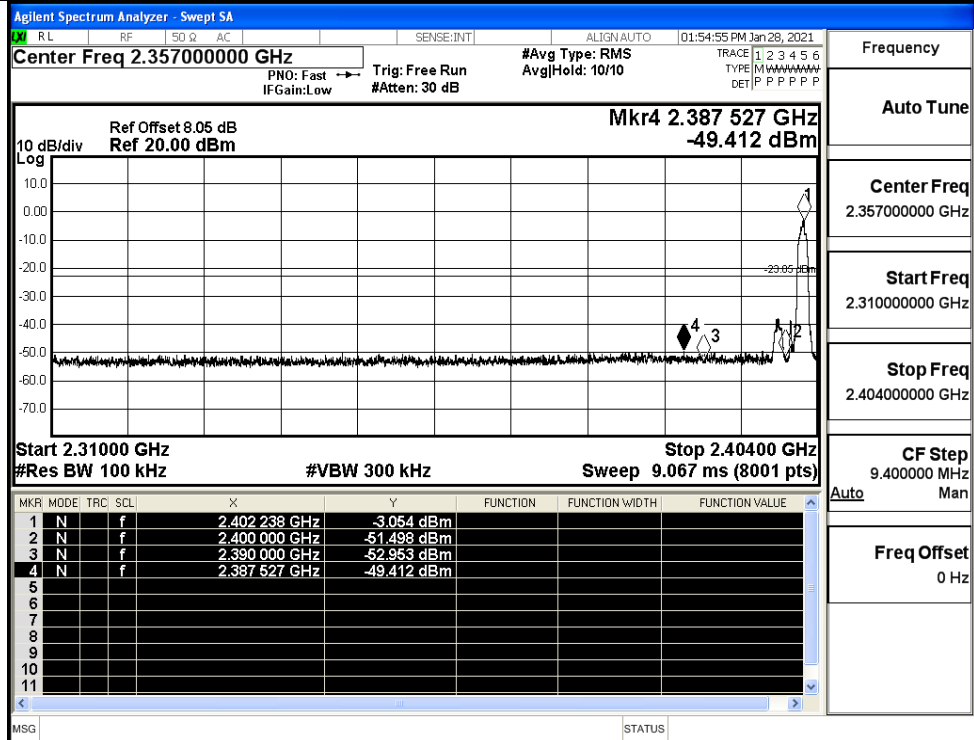
GFSK/HCH/No Hop



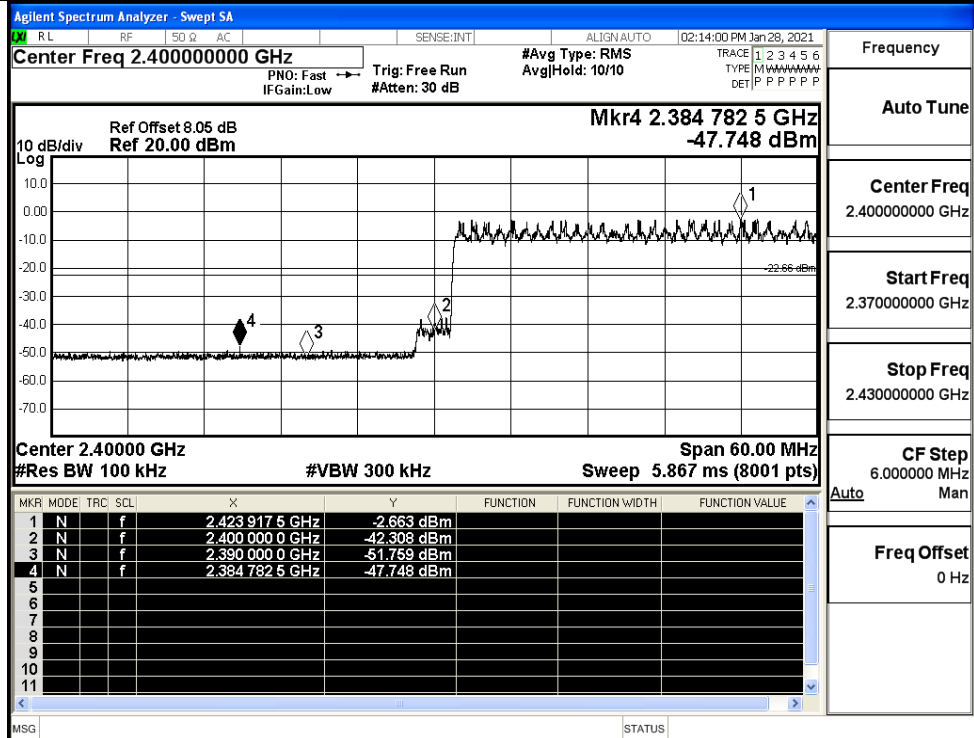
GFSK/HCH/Hop



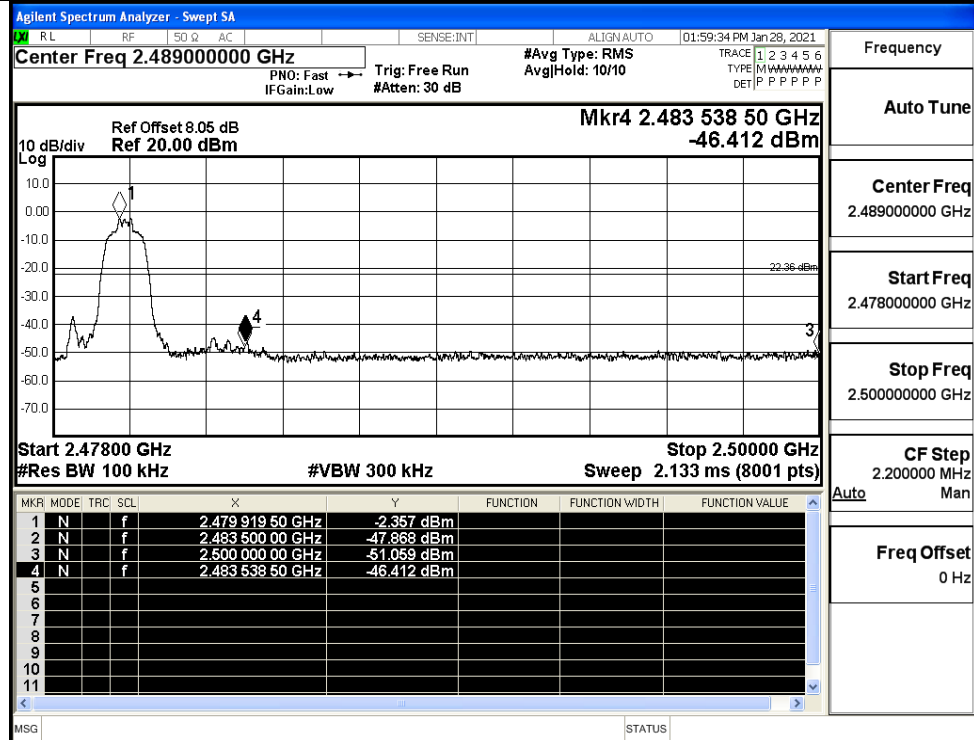
$\pi/4$ DQPSK/LCH/No
Hop



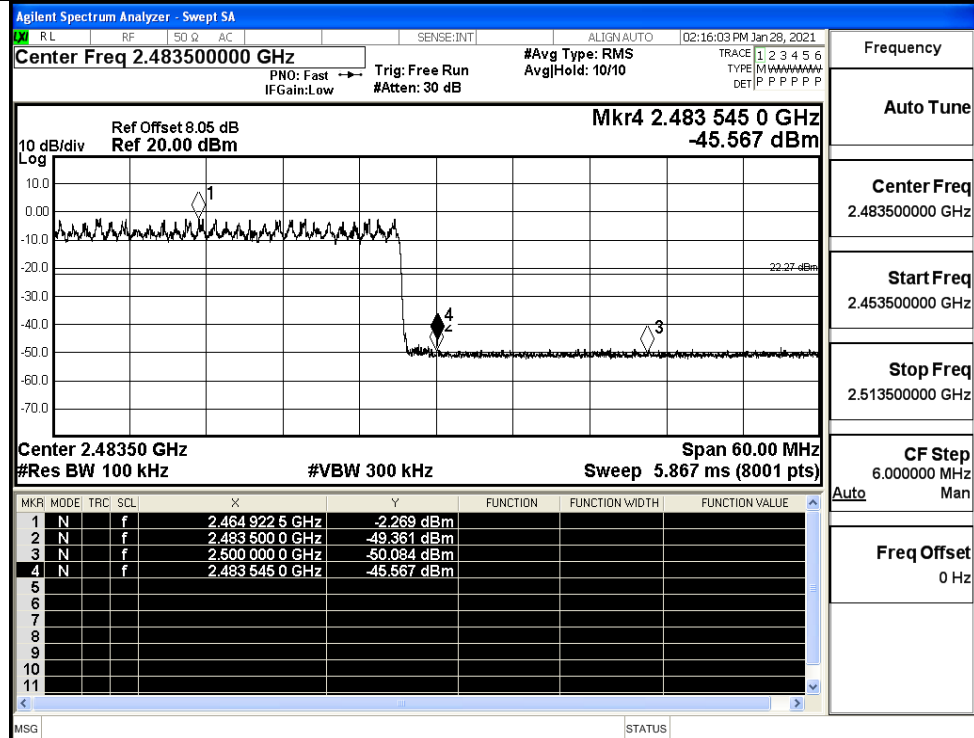
$\pi/4$ DQPSK/LCH/Hop



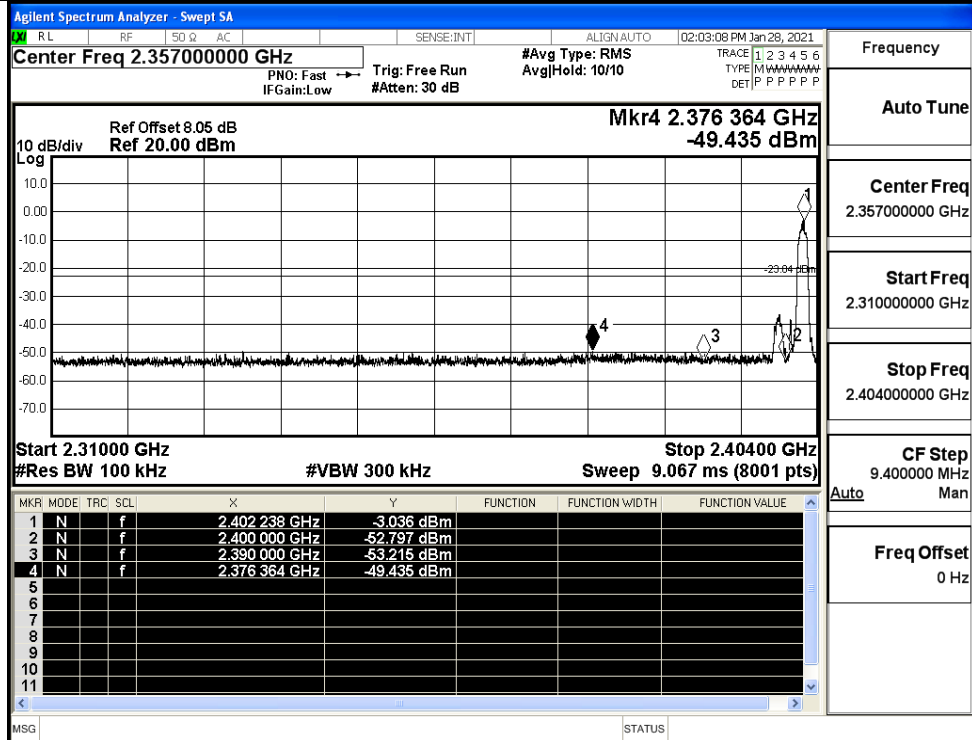
$\pi/4$ DQPSK/HCH/No
Hop



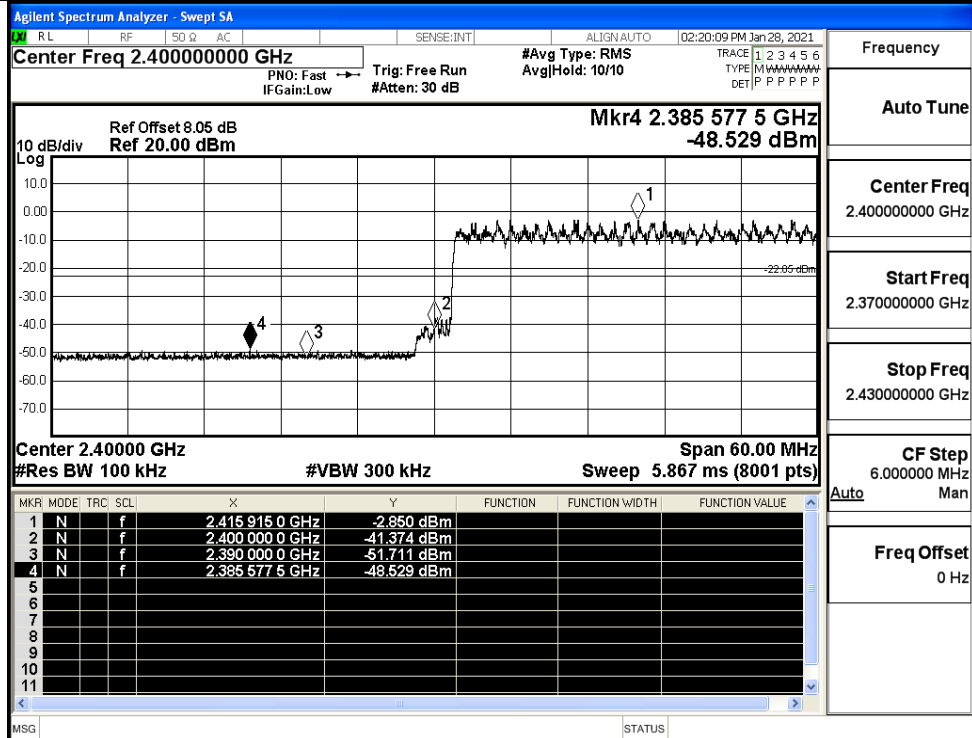
$\pi/4$ DQPSK/HCH/Hop



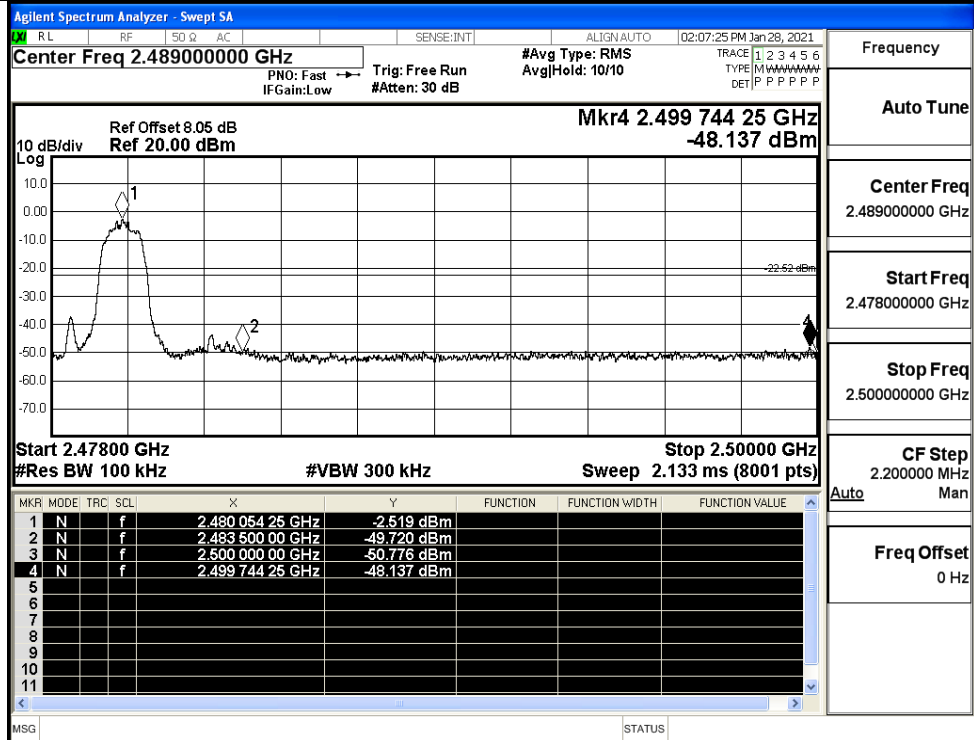
8DPSK/LCH/No Hop



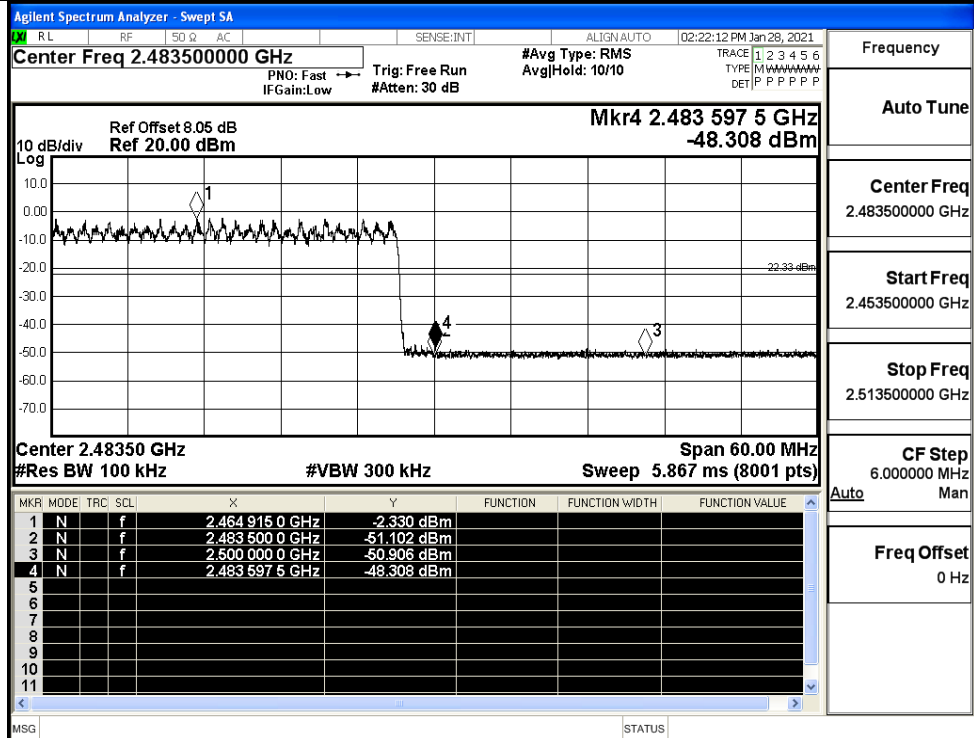
8DPSK/LCH/Hop



8DPSK/HCH/No Hop



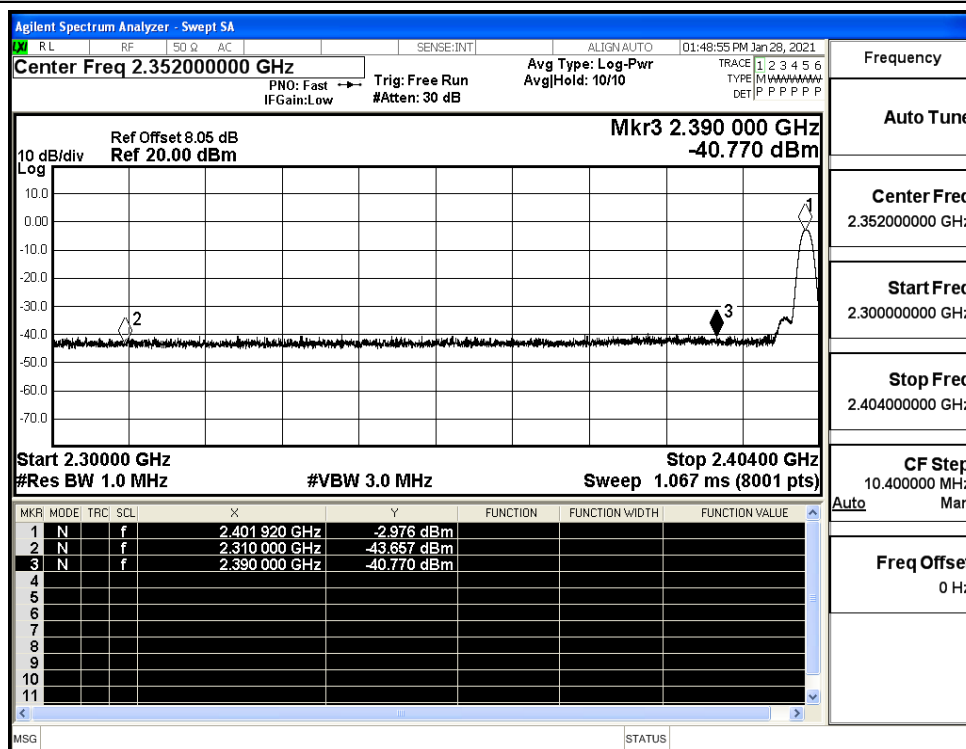
8DPSK/HCH/Hop



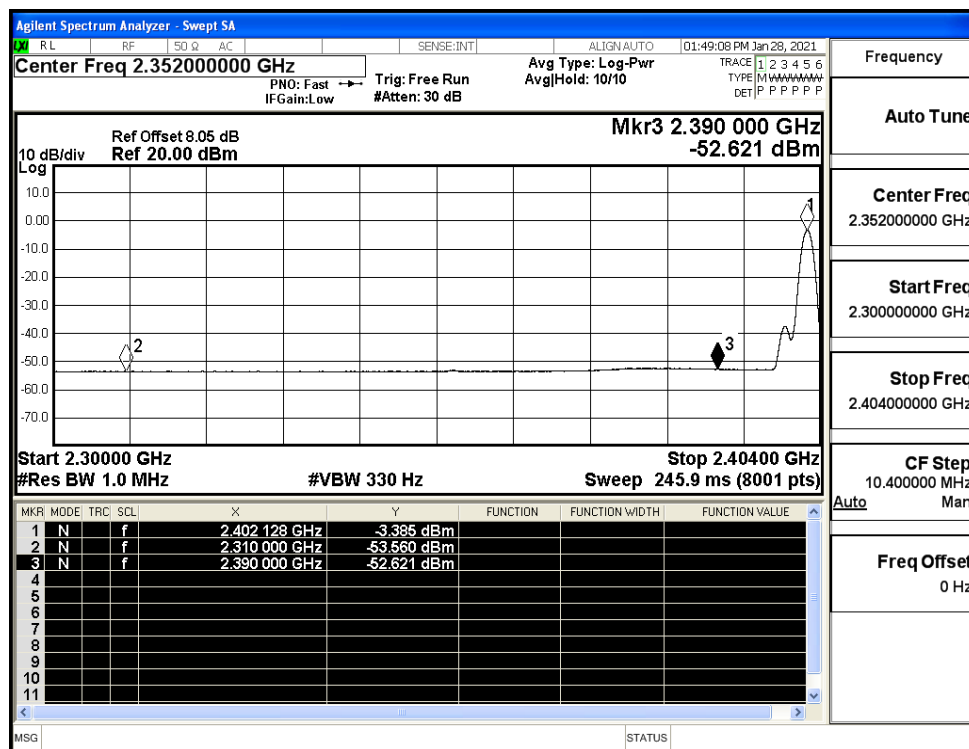
A.8 Restrict-band band-edge measurements

Test Mode	Hopping	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
GFSK	Off	2310.0	-43.66	2.0	0	51.60	PEAK	74	PASS
	Off	2310.0	-53.56	2.0	0	41.70	AV	54	PASS
	Off	2390.0	-40.77	2.0	0	54.49	PEAK	74	PASS
	Off	2390.0	-52.62	2.0	0	42.64	AV	54	PASS
	Off	2483.5	-39.94	2.0	0	55.32	PEAK	74	PASS
	Off	2483.5	-47.74	2.0	0	47.52	AV	54	PASS
	Off	2500.0	-40.67	2.0	0	54.59	PEAK	74	PASS
	Off	2500.0	-51.67	2.0	0	43.59	AV	54	PASS
$\pi/4$ DQPSK	Off	2310.0	-43.15	2.0	0	52.11	PEAK	74	PASS
	Off	2310.0	-53.48	2.0	0	41.78	AV	54	PASS
	Off	2390.0	-41.09	2.0	0	54.16	PEAK	74	PASS
	Off	2390.0	-52.61	2.0	0	42.65	AV	54	PASS
	Off	2483.5	-40.04	2.0	0	55.22	PEAK	74	PASS
	Off	2483.5	-49.77	2.0	0	45.49	AV	54	PASS
	Off	2500.0	-40.89	2.0	0	54.37	PEAK	74	PASS
	Off	2500.0	-51.63	2.0	0	43.63	AV	54	PASS
8DPSK	Off	2310.0	-42.95	2.0	0	52.30	PEAK	74	PASS
	Off	2310.0	-53.54	2.0	0	41.72	AV	54	PASS
	Off	2390.0	-43.22	2.0	0	52.03	PEAK	74	PASS
	Off	2390.0	-52.54	2.0	0	42.71	AV	54	PASS
	Off	2483.5	-40.01	2.0	0	55.25	PEAK	74	PASS
	Off	2483.5	-49.82	2.0	0	45.43	AV	54	PASS
	Off	2500.0	-41.59	2.0	0	53.67	PEAK	74	PASS
	Off	2500.0	-51.58	2.0	0	43.68	AV	54	PASS

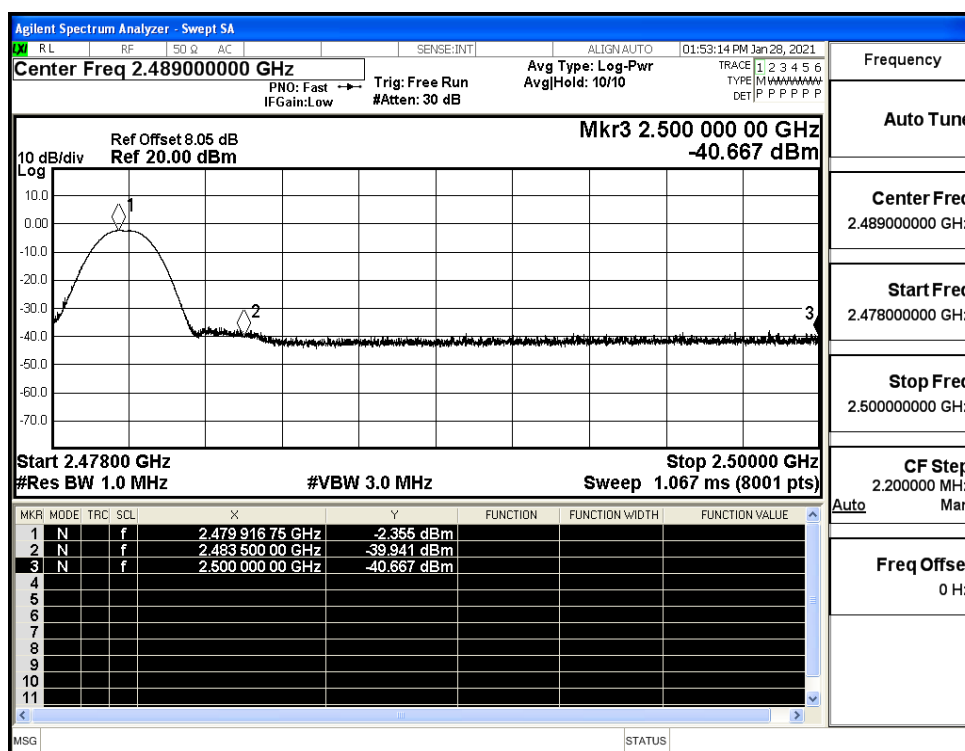
Restrict-band band-edge measurements_Hopping Off_GFSK_PEAK (Low Channel)



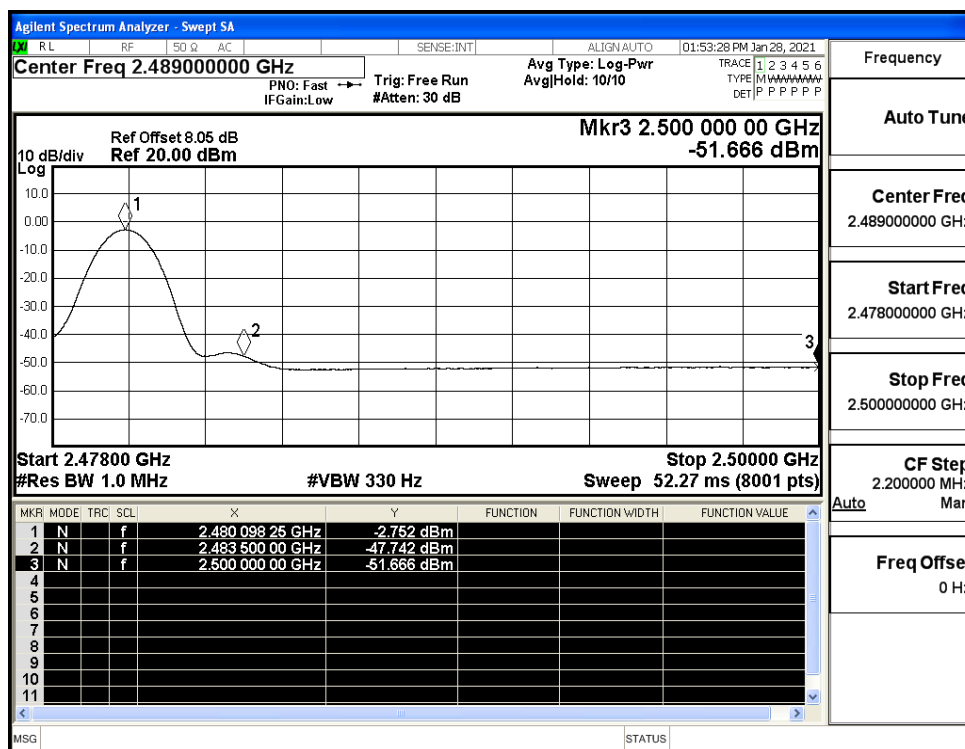
Restrict-band band-edge measurements_Hopping Off_GFSK_Average (Low Channel)

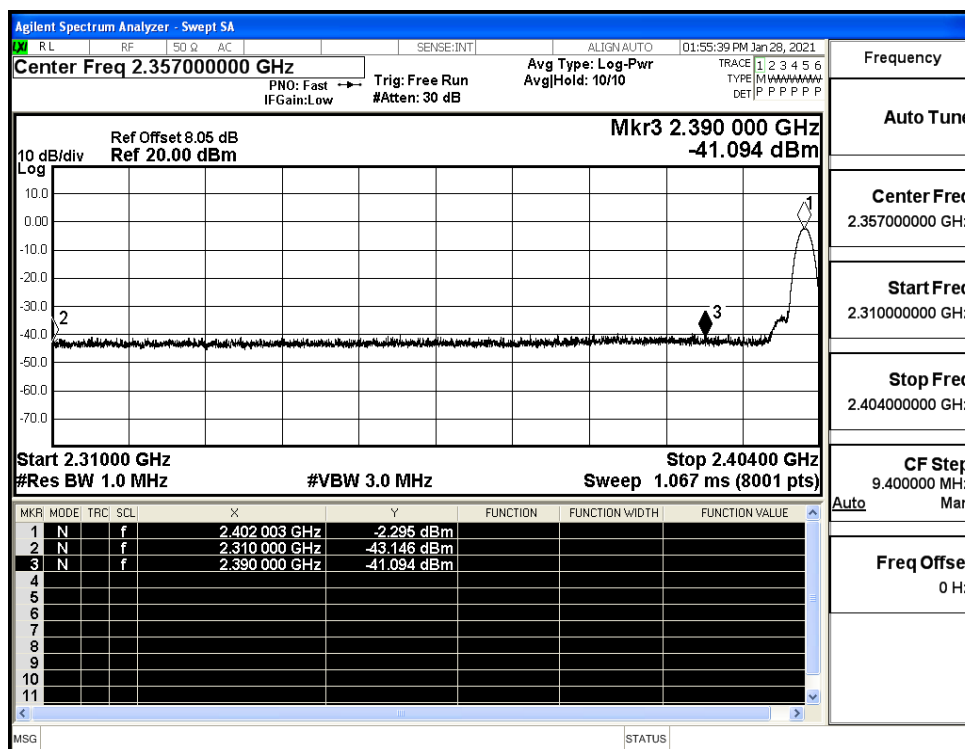
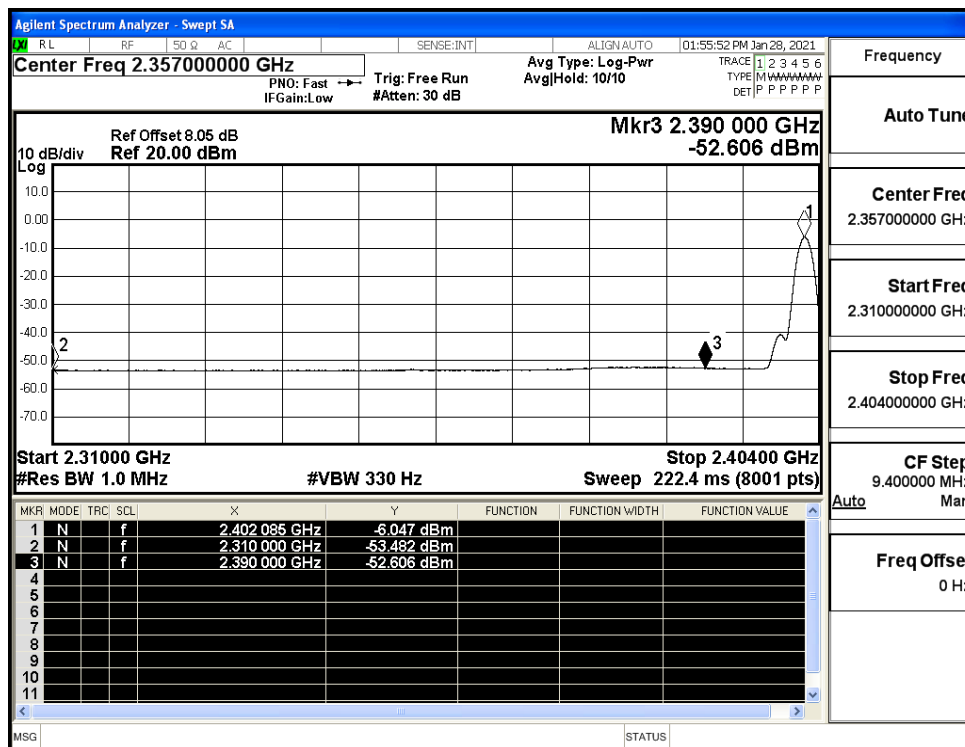


Restrict-band band-edge measurements_Hopping Off_ GFSK_PEAK (High Channel)

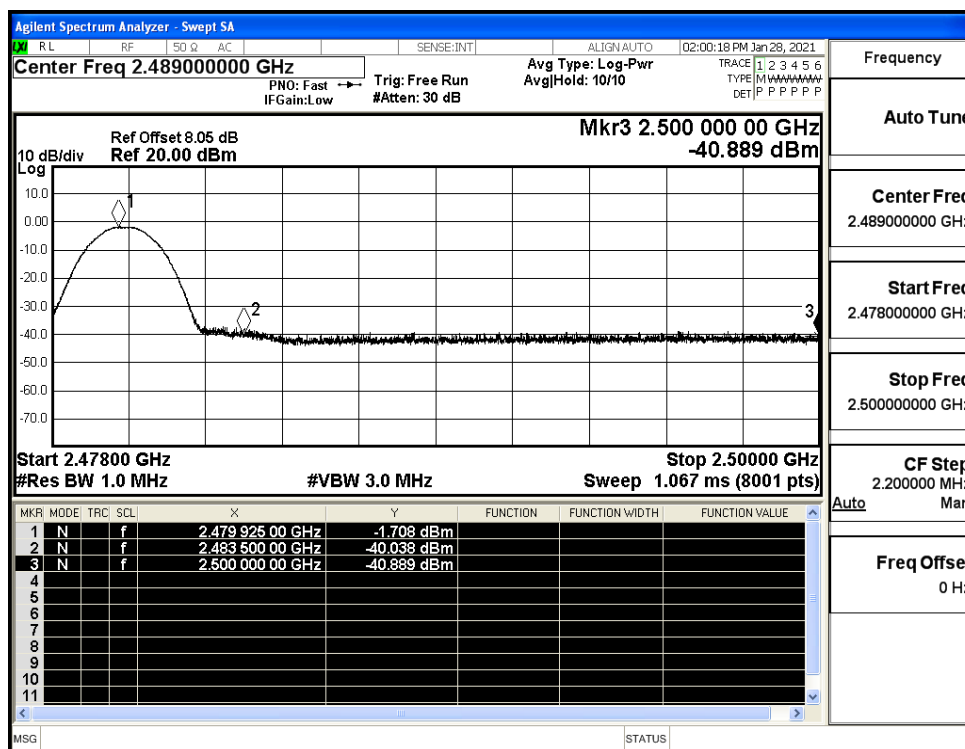


Restrict-band band-edge measurements_Hopping Off_ GFSK_Average (High Channel)

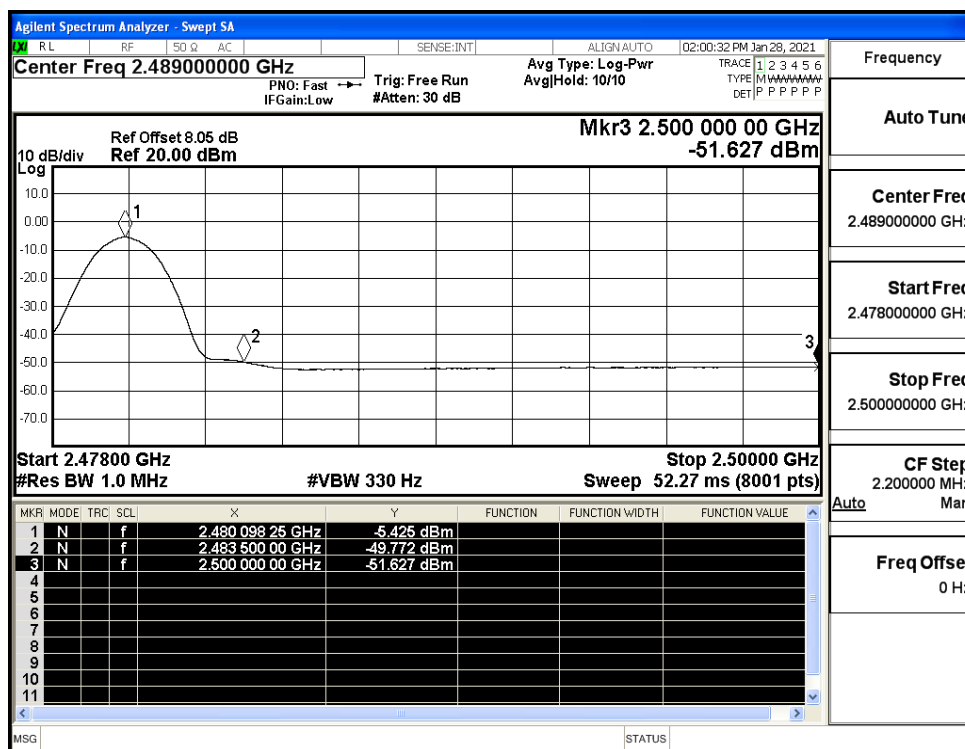


Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_PEAK (Low Channel)Restrict-band band-edge measurements_Hopping Off $\pi/4$ -DQPSK_Average (Low Channel)

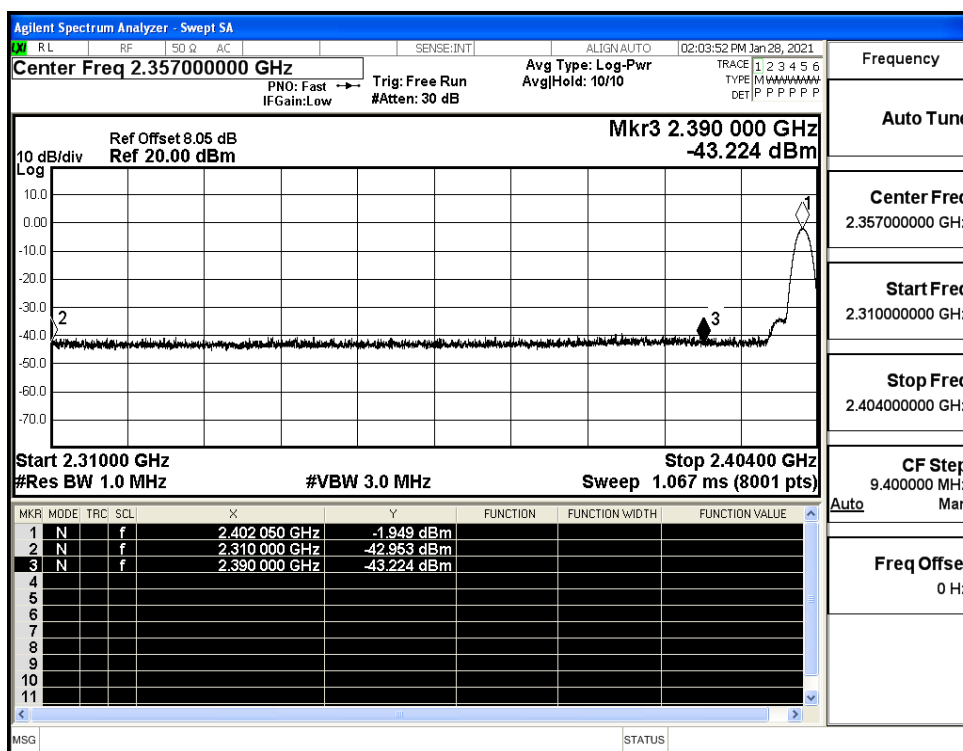
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_PEAK (High Channel)



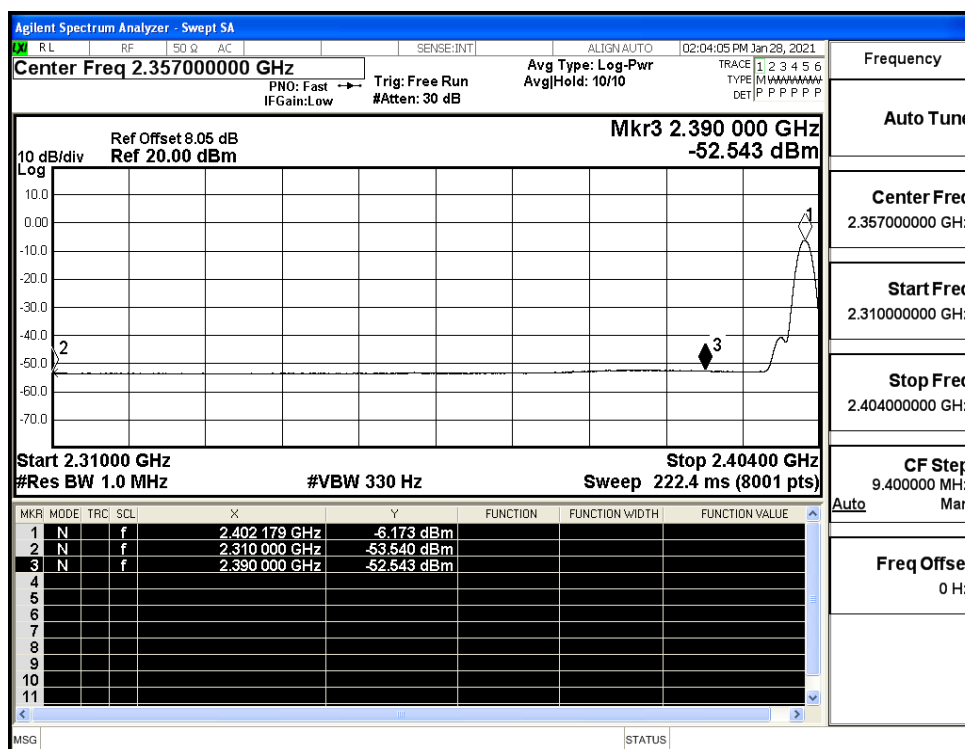
Restrict-band band-edge measurements_Hopping Off_π/4-DQPSK_Average (High Channel)



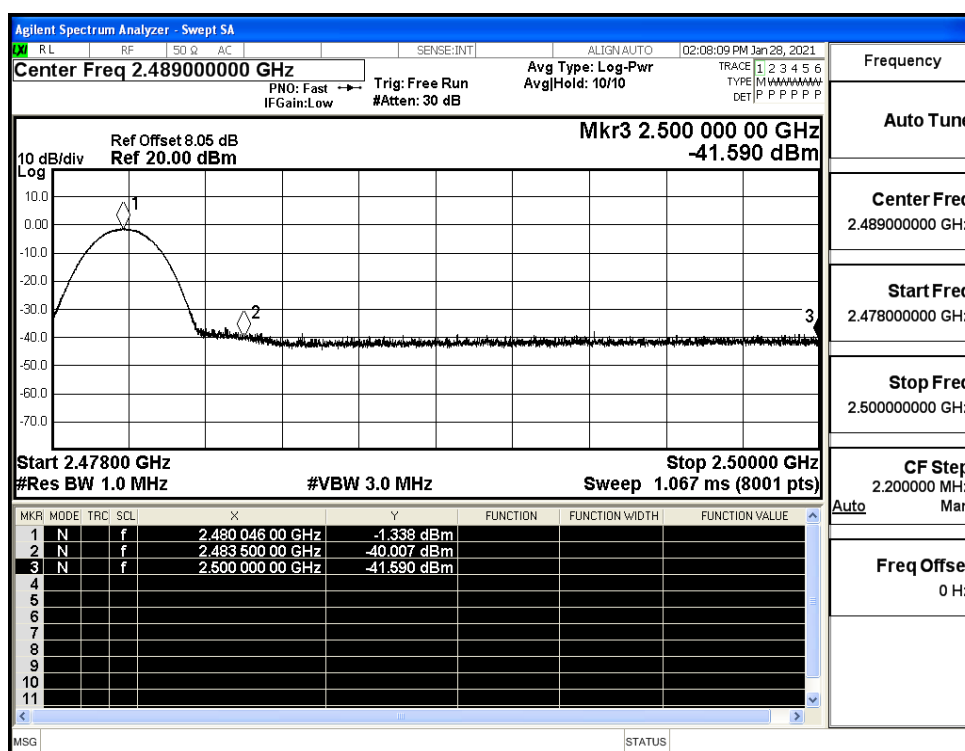
Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (Low Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_Average (Low Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_PEAK (High Channel)



Restrict-band band-edge measurements_Hopping Off_8DPSK_Average (High Channel)

